

INLAND



SEAS

QUARTERLY BULLETIN OF THE
GREAT LAKES HISTORICAL SOCIETY

VOLUME 2

APRIL ★ 1946

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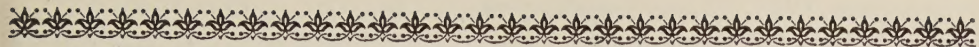
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History of the Cleveland & Buffalo Transit Company C & B Line

By A. T. ZILLMER

(Now that the Cleveland & Buffalo Transit Company is winding up its affairs, Mr. Zillmer, who has been associated with the Company since 1910, and has been secretary and treasurer since 1926, has compiled its history, dedicated to Alva Bradley, president of the Great Lakes Historical Society, and in memory of his father, M. A. Bradley. INLAND SEAS is happy to have the privilege of publishing portions of this valuable record. — *Editor.*)

THE DETROIT & CLEVELAND Navigation Company with a long record of successful steamboat operations on the Great Lakes, was a well established company by 1892.

It is a matter of record that a young man, T. F. Newman, secured employment with the D & C Line in May 1874 under Captain L. A. Pierce, General Agent of the company at Cleveland, and at the death of Captain Pierce succeeded him in 1880. In 1892, with the support of the Manager, a statement was prepared by Mr. Newman in regard to the opportunities of steamer operations between Cleveland and Buffalo. The report was submitted to the Board of Directors, of which Senator McMillan was Chairman. It was decided that the D & C Line could not afford under their relations with the Vanderbilt interests to undertake the extension of the D & C Line from Cleveland to Buffalo, paralleling as it did the New York Central Railroad between these two cities. Consequently, Mr. Newman undertook to interest others in the venture. He first interviewed Harvey D. Goulder, a very prominent marine attorney of Cleveland, who referred him to M. A. Bradley. Mr. Bradley consented to lend his aid, provided arrangements could be made to try out the new route for one year with two steamers to be secured under option from the D & C Line. If results were not satisfactory the steamers were to be returned and the option, about \$100,000, surrendered in full settlement with the D & C Line. Mr. Bradley's plan was adopted and the steamer *City of Alpena* — 225.2 feet long, 32.4 feet wide, 1221.98 gross tons, 917.29 net tons, and the

steamer *City of Mackinac*, 203 feet long, 32.4 feet wide, 807.89 gross tons, 564.52 net tons, were turned over to a syndicate in the fall of 1892. The *City of Alpena* was renamed *State of Ohio* and the *City of Mackinac* was renamed *State of New York*. The steamers were reconditioned and refurnished. Electric lights were installed, which only a few boats on the Great Lakes had at that time. The steamers started active operations in the spring of 1893.

The Cleveland & Buffalo Transit Company was organized under the laws of the State of Ohio. The articles of incorporation drawn September 12, 1892, were filed and recorded by the Secretary of State, September 13, 1892.

The first Board of Directors and Officers were as follows:

M. A. Bradley, Director and President
Geo. W. Gardner, Director and Vice-President
R. C. Moody, Director and Treasurer
Harvey D. Goulder, Director and Counsel
Daniel Shurmer, Director
J. K. Bole, Director
T. F. Newman, Director, Secy. and Gen'l Mgr.

The initial trip of this new service, made April 26, 1893, was an eventful one. Many prominent people were invited, and both steamers made the trip from Cleveland to Buffalo almost side by side the entire way, arriving in Buffalo the next morning. A new water line service was thus duly inaugurated. Boat travel was very popular, especially with Niagara Falls and week-end excursions as a decided attraction. Also due to lower lake, and lake and rail rates, the passenger and freight carrying capacity of the two small steamers was not sufficient to take care of the traffic offered.

The stockholders at a meeting held May 28, 1895, approved the building of a new steamer, then the largest sidewheel steamer on the Great Lakes, namely the *City of Buffalo*, dimensions, 298 feet 3 inches long, 43 feet 5 inches beam, 75 feet wide over all. The steamer was completed and made her inaugural trip in April 1896, replacing the steamer *State of New York*.

In 1906 to increase further the carrying capacity of the line the *City of Buffalo* was cut in two immediately aft of the smoke stack, then drawn apart and lengthened by building in a 42-foot section, making her dimensions after lengthening, 340 feet 3 inches long, 43 feet 5 inches beam, 75 feet wide over all, 2940 gross tons, 1604 net tons.

This is the only steamer of the C & B Line fleet that ever had its boilers renewed. This installation was made in 1921. The steamer was destroyed by fire March 30, 1938.

The stockholders, at a meeting held September 27, 1897, authorized building of the new steamer *City of Erie*, dimensions, 324 feet long over all, 44-foot beam, 77 feet 2 inches wide over all, 2498 gross tons, 1280 net tons.

This steamer was the fastest steamer of her day on the Great Lakes. One of the outstanding events of her career was the famous race with the steamer *Tashmoo* which took place on Lake Erie between Cleveland and Erie, Pennsylvania, June 4th, 1901. The steamer *City of Erie* was at some slight disadvantage in having to take the inner course where she encountered some shoal spots. However she did win the race by 45 seconds. She made her maiden trip from Cleveland to Buffalo on June 19, 1898. She was in active service 41 years, running approximately 1,335,000 miles. Her average fuel consumption for the round trip, Cleveland to Buffalo and return was 88 tons. She was sold in 1941, during the second World War, for scrap, providing material for other ships urgently needed by the government.

As a result of building the two new steamers a place had to be found for the steamers *State of Ohio* and *State of New York*. In 1896 when the steamer *City of Buffalo* replaced the *State of New York* on the Buffalo run a contract arrangement was entered into with the D & C Line to operate, on a 50-50 basis, in night service between Cleveland and Toledo. The C & B Line donated the steamer *State of New York* and the D & C Line donated the steamer *City of the Straits*. The *State of Ohio* continued on the Buffalo run until she was replaced by the steamer *City of Erie* in 1898. In this year the *State of Ohio* was chartered to Chicago interests for operation out of Chicago. In 1899 the *City of the Straits* was operated in day service between Cleveland and Put-in-Bay, in night service between Cleveland and Toledo. This service was continued with some variations.

In 1900 the C & B Line received \$30,000 from the D & C Line to equalize the interests of the two companies. In 1911 the C & B Line took over complete ownership of the *State of Ohio* and the D & C Line took over complete ownership of the *State of New York* leaving only the *City of the Straits* under joint operation between Cleveland and Put-in-Bay. In 1914 the *Straits* was abandoned and the joint operation between the C & B Line and the D & C Line was discontinued. The C & B Line continued the service to Put-in-Bay and added Cedar Point as a port of call. It operated this division continuously to 1938, inclusive.

The early pioneer days of steamboat management and operations were rather crude. There was very little regulation as to carrying capacity and supervision of accounting by government agencies.

Rather vital matters, such as paying rebates in some form to shippers, and issuing passes to every shipper, politician and others, were common practices. Also in accounting, quite generally the feature of depreciation and obsolescence was overlooked, the managements contending that the large amounts spent each winter to repair and maintain ships took care of these features.

Over the opposition of steamboat operators the water lines were finally compelled to come under the jurisdiction of the Interstate Commerce Commission and the United States Government. Under government regulations, freight and passenger tariffs had to be approved before they could be issued. All rebating and issuing of passes to those not entitled to them was made illegal. A uniform system of accounting was made compulsory. Accounting classifications were issued and the control of earning and expenses and general accounts became effective January 1, 1911, including a provision for depreciation. The water lines were permitted to use their own judgment as to the rate of depreciation applicable to their own particular operation. This, however was changed in later years and depreciation placed on a definite basis. No depreciation was taken into account until 1908 by the C & B Line.

In considering the question of building a new steamer the past record of the company was presented to stockholders at a meeting held February 1, 1912, as follows:

In 1893, the first year of operation, the gross earnings were \$109,-858.39; in 1911 the gross earnings were \$560,998.52, an increase in 1911 over 1893 of \$451,140.13 or 416 per cent.

The year of the Pan American Exposition in Buffalo in 1901 proved to be one of the banner years in the history of the company with gross earnings of \$669,531.49. Further data were presented as follows:

<i>Years</i>	<i>No. Yrs.</i>	<i>Gross Earnings</i>	<i>Average Per Year</i>
1893 to 1902	10	\$2,820,528.77	\$282,052.87 — inc. Pan-Am. year.
1903 to 1911	9	4,569,490.39	
Increase		\$1,748,961.62	\$225,668.28

or 80 per cent, notwithstanding the first ten years included the Pan-American year earnings.

The contract for the new steamer together with the financial plan was approved by stockholders at a meeting held April 25, 1912. The building of this great ship *Seeandbee* was an event of historical importance, as she was the largest and most costly passenger steamer on inland waters of the world at that time. She also was the most adver-

tised ship in the world as she marked the last word in marine architecture and magnificence of interior appointments, and was the crowning achievement of Frank E. Kirby, the noted designer of side-wheel ships.

Her dimensions were: length 500 feet, breadth over all 98 feet 6 inches. She had six decks, 510 staterooms and parlors, accommodating 1500 passengers, and could carry a train load of freight. Her main shaft weighing 120 tons was one of the largest forgings ever made. She had four enormous smokestacks, each nine feet in diameter, and a steel hull, double-bottomed with water ballast space, divided into 14 watertight compartments. Her hull above the water bottom was subdivided by 11 transverse water-tight bulkheads, ensuring maximum safety.

The propelling engine was of the inclined, three-cylinder, compound jet condensing type, having one high-pressure cylinder 66 inches in diameter, and two low-pressure cylinders 96 inches in diameter. The horsepower was 12,000, steam being supplied by nine Scotch boilers. The wheels were 32 feet 9 inches diameter fitted with 11 curved steel buckets. She was built at Wyandotte, Michigan, by the Detroit Shipbuilding Company, launched November 6, 1912, completed and equipped during the winter 1912-1913.

The steamer left Detroit at 8:35 a.m., June 19, 1913, receiving a tremendous reception from the shore, tugs, launches and passing vessels, and arrived at Cleveland in the afternoon of June 19, 1913. Even from the very end of the government pier cheering thousands hailed the vessel before she was inside the breakwater while a black mass of people lined the wharves as far south as Superior Viaduct, hung on rails of bridges or voiced their welcome from the roofs of buildings along the Cuyahoga River. The steamer was assisted by tugs in navigating the river channel. With only about a foot and a half clearance at best at the Main Street bridge she managed to scrape her way through. At 10 p.m. she left Cleveland on her maiden Buffalo trip with members of the Wholesale and Manufacturers Board of the Chamber of Commerce and friends aboard.

The building of the great ship *Seeandbee* appeared at the time to be a step in the right direction, but unfortunately the first World War broke out the year after the steamer was put in commission in 1913. This, coupled with an unprecedented number of marine disasters and particularly the disaster of the steamer *Eastland* on July 24, 1915, with the loss of 812 lives and the consequent adverse publicity, deprived the *Seeandbee*, from 1914 to 1918 inclusive, of the opportunity to demonstrate her real earning capacity. It should also be mentioned that under the Seamen's Act, a labor bill passed by Congress, among other

adverse features, the passenger carrying capacity of lake steamers before May 15 and after September 15 was so limited that it was impossible to operate profitably the *Seeandbee* except between these dates. Consequently this steamer operated on an average of only 90 days each year.

The four years, 1919 to 1922 inclusive, following the first World War, demonstrated to some extent what the real earning power of the line could be if operated at full capacity. The average net earnings for these years was \$229,017.38 after charging off an average yearly depreciation of \$87,194.52 and after United States income taxes, averaging \$46,364.75 per year were deducted.

The *Seeandbee* continued on the Buffalo Division until 1931 with an added fall cruise, Cleveland to the Soo and return in 1921 and 1922, and six special pre- and post-season upper lake cruises. In 1932 the vessel was not operated at all. In the following years to 1938 inclusive she was used in weekly cruise service. She was chartered to Chicago interests and continued in cruise service in 1939 and 1940, and in 1941 was sold to these interests.

The steamer was taken over by the United States Government during World War II, was dismantled and stripped to her hull and a wide flight deck laid over it. The conversion from a commercial ship in interstate commerce on the Great Lakes to a warship was made in record time. She was renamed the U.S.S. *Wolverine* and as an aircraft carrier training ship was added to the rapidly expanding United States Navy on August 22, 1942.

(To be continued)



Fishing in Lake Superior

By WILLIAM E. SCOTT

COMMERCIAL FISHING is one of those occupations which is accompanied by dull routine and severe hardships. However, there is a certain glamor and romance connected with it such as is accompanied by few other occupations. Fishing on Lake Superior is especially fascinating and hazardous because of the treacherous character of the lake. Sudden storms, dangerous off-shore winds, fogs, shoals and spring ice floes are elements with which the Lake Superior fisherman is constantly fighting.

Tourists along the North Shore of Lake Superior are greatly interested in its fisheries. The usual question they ask is "What kinds of fish are there in the lake?" Those found in greatest abundance are herring and trout. The tonnage of herring greatly exceeds that of trout. It is estimated that almost 5,000,000 pounds of herring are taken annually from the Minnesota shore of Lake Superior while the trout catch is about 1,000,000 pounds. There are about five times as many men fishing herring as there are trout fishermen. The herring belongs to the whitefish family, members of which include the herring, whitefish, menomonee, cisco, and bluefin. The more common native species of lake trout are redbfin, Mackinaw, "salmon" (red-fleshed), black, speckled, and rainbow trout. The latter two species, together with the pike, are game fish which come into the lake from inland lakes and streams. These are caught occasionally in nets near the mouths of rivers and in harbors although sometimes they are found two or three miles away from the mouths of streams. There are also a number of "introduced" salmonoids which are thriving, including brown trout, Lock Levans, steelheads, and Pacific coast salmon. Ciscoette trout, suckers, and lawyers are also occasionally caught.

In general, the members of the whitefish family live near the surface of the lake while members of the trout family live on or towards the lake bottom. All of these fish are on the bottom during the spawning season. The fish that live towards the surface may be called "top fish" while those that live towards the bottom may be called "bottom fish." Both the herring and trout are caught with nets, although the trout, when they live in upper intermediate water levels, are caught with set lines.

In certain circles, there is a belief that herring and bluefin are the same fish. That is not true. The bluefin is a larger fish, almost twice the size of the herring. It is generally $1\frac{1}{2}$ to 2 pounds heavier and is shorter and wider, especially through the back. It is named from the color of the fins which are a pretty blue. This species of fish is fast disappearing. There are three or four common kinds of herring classified according to the colors of their backs, as, brown-backs, blue-backs, and green-backs. The bluefin and also the whitefish, cisco, and menomonee have the appearance and look like herring, although they differ from them in their habits in that they all live towards the bottom of the lake.

The ciscoette trout is not like the ordinary lake trout. Neither is it like a cisco. It is not a scale fish and is full of oil. It grows to be as heavy as thirty or forty pounds. It should be smoked or salted before eaten.

A friend of mine, although he lives on the North Shore, had a sad but interesting experience with a ciscoette trout. He had invited guests from another region of the state to a fish dinner and went to a fisherman to buy some fresh trout. There was none to be had that day, but the fisherman said he had a ciscoette trout. That sounded all right to my friend. The fish looked good to him and over the protests of the fisherman, who said the fish wasn't any good to serve for dinner, he bought it and took it home to be prepared for the meal. The fish seemed full of grease and oil, but looked very appetizing, although his wife did say: "My, John, that thing is terribly fat." However, it was put on the table and all the guests remarked about the fine looking fish and whetted their appetites for the coming sumptuous repast. John, at the head of the table, proudly felt the fish with his fork. Then he jabbed it into the fish. Immediately, he thought he had struck an oil well because the oil from the fish squirted up to the ceiling. He then opened the fish and found there was not enough meat in it to serve one person; all the rest was oil. The guests finished their dinner with pork chops.

Herring are caught by using floating nets about 300 feet long and 11 feet wide. There are lead weights at intervals at the bottom of these nets to keep them down in the water. The tops of the nets are attached to floaters so the nets really float at all times. In other words, herring are caught by top nets.

Trout, on the other hand, are caught sometimes with nets, and sometimes with lines set near the bottom. The ordinary trout nets are set on reefs and in shallow water. The nets for ciscoette trout, which are valuable commercially, are set in very deep water—300 to 800 feet in depth. A trout line has baited hooks on it about every 60 feet and above each hook is a floater.

The Johnson brothers, well-known fishermen along the North Shore, for example, fish during the spring and summer at Isle Royale. For trout they go out on the lake from one to twenty-five miles to fish. Even on dull and foggy days when they can see only 100 feet ahead, they go to their trout lines twenty-five miles away. They use an oil compass, know the running time and run their course out to their lines. It was mentioned before that ordinary herring nets are only about 300 feet long. How then can a fisherman find his trout lines when they are twenty-five miles out on the lake? The answer is that these set lines are often ten miles or more in length and therefore by changing their course occasionally, fishermen can pick up their lines when they get in the vicinity. Sometimes, large ships pass over the lines, but little damage is done because only the floaters are on the surface. The average depth of the lines is about 65 feet. The boats slip over the top line, so only a few floaters are ruined.

The best times of the year to fish trout are in the spring and in the fall. Every good fisherman knows the habits of lake trout and can tell where they are at any particular time of the year. In the spring, the trout are far out in the lake, as far as twenty-five miles, at least they are caught that far out. Towards the latter part of July they come towards the shore and live on reefs. A little later they are ready to leave for their spawning grounds where they stay for a period of about two weeks. They generally start to spawn about September 20th and a succession of species may be found on the reefs near the shore from that date to the end of November.

Lake trout spawn in September, October and November, and at that time of the year they run very much in pairs. When fish are caught during that period, the fisherman strip into a pan the milt of the male fish and the spawn of the female. The eggs are left standing in the pan for four or five minutes after which water is poured on them. The milt is cleaned away from the spawn, and then the spawn is allowed to stand in a pail of water for four or five hours in order to give it a chance to toughen. The spawn is then placed in rows on trays made of screen. Finally, it is watered once a day until it is shipped to the fish hatchery where it is kept in running water till April. By that time the spawn has developed into small fry which are shipped back to be planted in the big lake.

After the trout are through spawning on the reefs, they leave and go back into deep water where, apparently, they stay all winter. After the danger of spring ice floes is past, the fishermen resume fishing for trout from one to twenty-five miles out at sea.

The habits of the herring are somewhat different. In the spring of

the year, the herring will come into the harbors and along the shore where they remain until about July. They then disappear and the supposition is that they go far out into the lake. At that time of the year very few herring are caught. They come back in October and stay near shore until late November when they are through spawning.

There seems to be some difference of opinion as to whether the herring or the trout is the cleaner fish, but the Johnson brothers maintain that the trout is the cleaner. They say that the trout seems to be more particular about the kind of water it lives in. It will not stay in muddy or roily water after a storm is over, for example, but will go out deep into the lake and will not return until the water is clear again. The habits of the herring are somewhat similar, but they are not quite as particular as the trout and will be found in more cloudy water.

At the bottom of some parts of Lake Superior is a certain type of blue clay. When the fishermen go far out into the lake they look for shoals or reefs. They search for them and must discover the depths of these reefs. They do so by sounding out with a piece of lead weighing five or six pounds in which is made a hole, and in this hole is put a piece of lard or butter. When this is dropped to the bottom of the lake, if it strikes clay, the clay will stick to it and will be brought to the surface. If the bottom is rocky, nothing will adhere to the lead.

The writer asked one well-versed fisherman what he thought would be the agricultural possibilities of the bottom of the lake were it to run dry. Would the bottom be mostly rock or would it be of the nature of clay? The fisherman thought the bottom of the lake was largely rock, although there is considerable clay between Duluth and Grand Marais. He was not optimistic.

The tourist naturally wants to know how he, himself, can catch fish. He can catch fish by trolling. The trolling season lasts from July until September 15th. Very good trolling may be had during this period, and if an amateur goes out with an experienced fisherman he may be sure of getting a nice catch.

The dangers in Lake Superior are thrilling. A few years ago two men sailed a small boat forty-two feet in length from Norway to Duluth in honor of the Leif Erickson Celebration. The feat was heralded all through the country as a brave and daring one. The skipper of this little boat told a fisherman friend of mine that of all the journey, no part of the trip, including the crossing of the ocean, was nearly as dangerous as the last day they spent coming across Lake Superior to Duluth in a northeaster. The skipper remarked on the stamina and courage which a fisherman must have in order to fish in the Lake Superior waters.

During the winter, fishing is often done through the ice, and it is a common occurrence to have big ice floes cut off from the mainland carrying off some of these hardy fishermen. Sometimes rescues are effected and sometimes they are not.

Another source of danger during the summer months, especially towards evening, is the off-shore winds. It is impossible for a fisherman to make shore by rowing against a strong off-shore wind. Even motor boats have difficulty in making the shore. Sometimes fogs come up suddenly and when they do it is often disastrous for these hardy men, especially if they do not happen to be equipped with a compass. A U. S. Coast Guard is stationed at Two Harbors, and one of its common duties is to rescue fishermen who are being blown out toward the middle of the lake, or who have been lost in fog. The storms that come up often arise without warning. Many fishermen are lost annually through the terrible lashings given their boats by the angry storms of Lake Superior.

On one occasion off Knife River, two young men were putting out their nets for herring. Suddenly, one of the men was tangled in the anchor line of the nets and pulled overboard into the cold lake. The weights attached to the nets were pulling him down when he was caught by his companion, who had great difficulty in pulling him back into the boat, but finally did so at a great risk to his own life.

As one journeys up and down the North Shore Road, he is not only impressed with the beauties of the scenery and the moods of the lake, but he is also deeply impressed by the occupation of the hardy and valiant men who inhabit the little fishing houses along the shore.

(Author's Note—This article is a result not only of the author's own personal observation, but also of information received at various times from conversation with Lake Superior fishermen. To the Johnson brothers, Milford and Arnold, of Isle Royale, and to Mr. R. E. Gale, Superintendent of the French River Fish Hatchery, he is especially indebted for much of the information herein related.)

From Fort Niagara to Mackinac in 1767

Originally issued as Historical Bulletin No. 2 by the Algonquin Club of Detroit in March 1938.

EDITORIAL INTRODUCTION

AMONG the Porteous papers in the Burton Historical Collection of the Detroit Public Library is the rough draft of a long letter describing the country which lies between Fort Niagara and Mackinac. John Porteous, who had made the journey by way of the rivers and lakes several times, wrote the letter at Mackinac to his father in Scotland during the summer of 1767, when the famous Major Robert Rogers was commandant of the British post there.

John Porteous came to America from Perth, Scotland, in 1761. The next year he was at Detroit and Mackinac engaged in trading as a member of the firm of Duncan, Sterling, and Porteous. He was at Detroit during the Pontiac siege of 1763 and from time to time during the next ten years. Then he went to Montreal. When the British occupied New York, he removed there and established himself in business.

In 1778 Porteous transformed his merchant ship, the *Elegante*, into the privateer, *Vengeance*, which successfully preyed on colonial shipping until it was lost without trace in 1780. Reports to the owner from Captain George Dean and John Richardson, a shareholder in the venture, were published in Volume VII of the *American Historical Review* (1902).

Porteous left New York in 1783 with the retiring British troops and returned to Scotland. But within a year he was in Nova Scotia. In 1788 or 1789 he settled at Little Falls, New York, in the Mohawk Valley, where he engaged in trade and built a mill. He became a citizen of the United States in 1790 and was active in local politics until his death in 1799.

The letter which follows is presented just as it was written except for the omission of most of the material crossed out by the author (of which there was a great deal), the insertion of marks of punctuation (of which there were very few), and the breaking of some very long sections into paragraphs.

—F. CLEVER BALD.

Michilimakinac 16th August 1767

AS THE SEASON now begins to allow me an hour or two now & then from Business, I have resolved to occupy a few of my spare moments in resuming the short acct. I formerly began to give you of our voyage from N York to this place. I then brought my acct. as far as Ontario.¹

There is nothing very remarkable in the discription of Lake Ontario. It is the Least & by far the most Compact of the 5 Great Lakes; its

¹ These opening sentences are written between the lines which follow, and which are stricken out in the manuscript: "There are things so Curious & uncommon in a view of the

Length 270 M & Breadth 65 Miles.² (Am. Gaz.). The only Islands in it ly near the Mouth of St. Laurence River, of which there are a number. Some of them are remarkable for the quantity of Sea Gulls coming to hatch on them that one can in a very little time load a boat with eggs, which are excellent eating. It is generally very deep. A short way from Shore no bottom can be found with 200 or 300 fathom of Line, & out of Sounding. It is as remarkably cold as any fountain in summer.

All open boats, whither Batteaux, whale Boats, or Canoes are obliged in crossing the Lakes to keep near the Shore for fear of Storms & Squalls arising. The greatest danger of which is in getting ashore that sometimes cannot be approached without risk. Boats who Stand too long out in Such cases are often compell'd to bear away before the wind tho' contrary to their intended voyage. I have run a day myself in a bark canoe when I durst not come within Several miles of the Shore in some places, but I desired nothing better, having a settled wind & sure of a good harbour before night. & I have known people carried across the Lake & 3 days without Sight of Land, after throwing over-board the most part of their loading.

In this method of traveling, the following precautions are generally used wt success: to take the wind fair, or of Shore (otherwise there is seldom a possibility of stirring); then put ashore at night, unload & haul up the boats several yards from the water, according to the steepness of the beach, which cannot be done where the banks break of perpendicular or the shore rocky. Yet there are such places for 10, 20 & 30 Miles together, especially on L Erie; so that if a gust from the Lake takes boats in these places that they can neither go on or return, they are dash'd to pieces without the recovery either of boat or Cargo. Men may Shift here and there to scramble up & save their lives if it is not

great Lakes in this Country, which is not to be met with either in the American Gazetteer* or any history I have yet Seen. For tho' Charlevoix, the French Jesuit, has traveled from the mouth of St. Laurence to the Mouth of the Mississippi & Staid long in the Country, having wrote a large history of all French America, yet is so atrocious a liar in many things that there is no depending upon what writes. Patience I could not allow myself to read the ½ of his first volume." Pierre Francois Xavier de Charlevoix made a tour of inspection of the western country in 1721. He later wrote an account of his trip in *A Journal of a Voyage to North America*, published in 1744. The first English edition appeared in 1761. Louise P. Kellogg, who edited a two-volume edition of this work which was printed in 1923, writes in the introduction: "There is no other source which approaches his journal either for accuracy or discrimination . . ." pp. xxv-xxvi. But she admits that he sometimes exaggerated.

Perhaps Porteous' sharp criticism is partly the result of his Scotch-Presbyterian bias.

**The American Gazetteer, Containing a distinct Account of All the Parts of the New World*, 3 volumes. Printed for A. Millar, and J. & R. Tonson, London, 1762.

2 Length 193 miles, breadth 53. Distances given in this Ms. are almost invariably greater than the fact.

in the night, which they scarce deserve to do who either pass some of them in the night or bad weather.³ The reason of hauling up the boats is on acct. of the Surff or swell rising, which it sometimes does in the most profound Calm, to the ruin of many a boat; but this is a certain Sign of a hard Storm in a few hours after.

There are scarce any Safe harbours for boats on any of the Lakes, except where rivers empty themselves, & unless they are moderately large, they remain choaked up most part of the Summer by the sand & gravel thrown up by the impetuous fury of the Lakes. From the time that the Spring floods begin to lessen the weight of them, currents in small rivers, being unable to break thro', are forced to dissipate themselves & fall into the Lake imperceptably. These we sometimes break open (as they have generally spacious harbours within) with paddles rather than unload; & when entered, boats ly with Safty. I have caused a passage to be cut thro' the roots of a huge tree thro' which the Creek emptied itself. (Paddles are small oars generally of 4 or 5 feet long & are used with the hand, without any purchase or Strain upon the boat. They are always used in bark canoes, & to Steer boats that have no rudders; also in small rivers too narrow for the Oar or too deep for the pole. For which reasons they are entirely used by the Indians, who know nothing of working with the oar.)

Lake Ontario is pretty good Navigation for boats between Oswego & Niagara, 165 Miles, & has great many good harbours, if towards Spring. The land is pretty high in some places, lowering gradually, not mountans, but in general very low, which is frequently the best ground & carries the best wood. Near Niaga are high clay banks which often fall in & wash away. The River above the fort has the same effect upon the banks & has now reduced the situation of the fort to a promontory.

Niaga is not so unplaisant in Situation as in climate.⁴ It Stands high on the brink of the Lake & overlooks a Clear plain for a Mile & half round on the land side, as also the low woods & ground on the other Side the river, wt part of the Land across the Lake in a Clear horison. & all the Approaches of the English army are yet visible when it was beseiged & taken.⁵ The Soil, a dry stiff clay, is not very productive, their best gardens being on the other side the river. It is so much exposed to the stormy north winds of the Lake, which makes it prodigious cold & uncomfortable. The Fortifn is strong, tho' not inaccessible.

3 "I cannot heelp think that Solomon's Proverb of the Simple passing on & are punished is herein justly verified." Stricken out in the Ms.

4 Fort Niagara built by the French in 1727 on the east bank of the Niagara River where it enters Lake Ontario.

5 Captured by the English under Sir William Johnson, July 25, 1759.

The walls, ditches, &c. are of earth, sodd, & Pickets of wood. The trading town is a low flatt in form of a semi-circle surrounded by the river, except on one side by the fort, which Shelters it from the N. E. Winds.

Hence we go up the Niaga River 8 Miles to a Small fort call'd the Lower landing,⁶ where the vessels carry up the provision intended for Det. This far the river is about $\frac{1}{2}$ mile Broad & about 16 fathom deep with high & steep Clay banks. Here there are machines⁷ that can take up a small⁸ boat & her loading at once to the top of the bank & thence over two hills of considerable height.⁹ This Chain of mts. runs across the river & Country, Here extendg on both sides as far as can be seen. The descent is only on one side, being level at the top, from which is a delightfull prospect extending even across L. Ontario. The surface of the thick woods below appear like a large smooth heath intersected by a beauteous Canal, making the prettiest landskip of the kind that nature can produce. Here is a large piece of fine ground inclosed wt a picketted wall in Manner of a fort, call'd Mt Pleasant, which with the machines were erected in time of the late Indian war,¹⁰ the latter to save 2 Miles Carriage in avoiding the steepness of the hill (but only that one on the bank of the river is now made use of), & the former to Secure a party for working the machines & for a gaurd to the horses & oxen on the Carrying place. At the Same time, viz. in 1764, was built 9 Small redoubts¹¹ along the road betwixt this & L. Niaga,¹² each mann'd with a Serjt. & 12 Men to Secure the portage of Provisions & baggage belonging to Mr B's¹³ expedition to Detroit in 1764. From M. P.

6 Now Lewiston, N. Y.

7 Inclined planes built by the British up which boats in "cradles" were drawn by windlass and cables. The boats were then dragged over the rough portage road by oxen to Fort Schlosser, above the Falls, where they again entered the river.

8 "Small" was stricken out in the Ms. The writer probably meant that the ordinary boats and bateaux could be carried by the "machines."

9 These hills, which seem of little account to Porteous, were thus described by Charlevoix: "three mountains placed one over the other, and whereof the last hides itself in the clouds. This would have been a very proper scene for the poets to make Titans attempt to scale the heavens." I, 328. Perhaps it was such descriptions as this that tried John Porteous' patience.

10 The Pontiac War, 1763. A large war-party of Senecas ambushed a train of wagons and pack-horses convoyed by troops on the portage road, September 13, 1763. A detachment from the Lower Landing hurrying to aid their comrades was also ambushed. About seventy were killed.

11 Built in May, 1764, by Captain John Montresor at the command of Colonel Bradstreet.

12 Fort Little Niagara built in 1750 by Daniel de Joncaire de Chabert at the end of the portage, about a mile and a half above the Falls. Called also Fort du Portage and the Little Fort. Fort Schlosser, built in 1759 by the British, was somewhat farther down the river. The names "Little Niagara" and "Fort Schlosser" seem at this time to have been used almost interchangeably.

13 Colonel John Bradstreet who set out with an army in August, 1764, to reduce to sub-

[Mount Pleasant] to Little Niaga is 9 Miles,¹⁴ & about twice as much to follow the bend of the river.

The great Fall is 2 Miles below L. Niaga, a magnificent piece of the works of nature, justly reckoned the greatest cataract in the known world, acctg for the body of water & height of the fall. The river at L. Niaga is about 2 M. broad, gradually Lessening its breadth & increasing its current towards the falls. For near 1 Mile above the cascade it runs with immense rapidity, making a noise like the loudest Thunder, & its broken waters in most places roll like driving Snow, occasioned by its great descent over a rough rocky bottom. It is in a manner the Same after leaving the fall great part of the way to the Lower Landing. There is an Island at the top of the fall which divides the Stream nearly in the middle, occasioning also a small island opposite at bottom. The form of the fall is bent in manner of a half moon, So that the whole can be easily Seen on either Side.

The water falling over appear in Some places of a great depth & of an entire green colour, which it preserves to a perfect brightness till passing the Lower Landing. The greatest body of the water seem broken in the outside into particles after falling a little way by the opposition of the air in so great a height as 176 feet, & the rock is so perpendicular that in few places the water touch it after falling over. Near each end, where the body of the water is least, it falls upon naked rocks; thence arising like fog, filling the place all around with continual vapours which ascend in the air like thick smoak whereon is painted a most beautiful rainbow when the Sun Shines bright; but contrary to them in the Clouds, as it appears below the horison & under or towards the sun. By the imense depth of the water at bottom, it makes a prodigious hollow noise as if under ground, & is heard much louder sometimes at a distance than nearer. The water is continually in the greatest agitation like a boiling Caldron for a great way below; in Calm, clear weather its ascending vapours can be seen a great way, both in the Seneca Country [and] on lake Ontario, & I have heard it 36 Miles of on L. Erie myself. But all the time & paper I could take up in its description would only give an imperfect Idea thereof.

From L. [Little] Niaga to the mouth [head] of the river is 20 Miles a plaisant Smoath river with a heavy current in which are Several pretty Islands, the principall of which is 10 Miles long & 8 Broad at its utmost extent.¹⁵ The next, call'd Navy Isld., is 3 Miles above L. N.

mission the Indians around Detroit and farther west. Instead of fighting, Bradstreet made treaties which the Indians had no intention of observing.

14 Five miles.

15 Grand Island.

[Little Niagara], about 4 Miles in circumference. Here the Lake Erie Vessels are all built, & some of them frequently used to fall down to winter here, tho it is not without difficulty & a Staggering breeze they can get up over the rappid at the river's mouth [head]. The river at the rappid is 300 yds broad, 9 fathom or 18 yds Deep almost Close to the Shores & runs at the rate of 7- $\frac{1}{2}$ Miles an hour. From thence you may judge the body of water imbibed by it. Both the main land & Islds. from this to L. N. [Little Niagara] are all low & very fertile, bearing fine wood, & hay in the meadows. Fort Erie¹⁶ is built on the N Coast of the Lake Erie 1 Mile above the rappids. This fort was built in 1764 on purpose for the provision Stores, it being brought thither in boats; & here the Detroit vessels always come to anchor & load. It is a pretty little fort, Stands in a small bay on a low fertile Soil environed with most kinds of wood of an immense Size & height.

Lake Erie is 315 Miles in Lengh & at its greatest breadth, 68 Miles.¹⁷ The land, in some places high & some low, on the northcoast is very fertile. There is not the least shaddow of a Mountain the whole course. It is in general ill water'd; sometimes 46 Miles where scarce a drop falls into the Lake, & there are few rivers or harbours all the way, but, on the contrary, great & long chains of Steep Clay banks, where a boat cannot land sometimes for 16 Miles; & one bank is 30 Miles in length. The south Shore is more barren & mountaneous but affords fine harborage for boats. It has fine rivers every 10, 12, or 16 Miles all the way for 300 Miles to Sandusky; thence 100 Miles to Detroit is low fertile land intermix'd with fine rivers & meadows.

On the north Shore, 100 M from F. Erie, is the Grand point,¹⁸ which is rather a Peninsula, being join'd to the Continent only by a narrow beach & marsh over which we always carry by hand boats & loading about 100 yds, as the point Shouts [shoots] 50 M. out, reaching near Presqu'isle on the other Side the Lake. About 60 m. from Detroit river, on the Same Side, is Point Plais,¹⁹ over which we carry in case of head winds. We thereby save 15 Miles. We have very fine hunting all along this Shore both for Deer, bears, Racc. &c., & also Geese, Turkies, ducks of all kinds, &c.

From Point P. [Pelee] westw, the Lake is fill'd with a number of very fine Islands, call'd generelly by the french ye Snake Islands, & by the Eng. different names, respectively. Some of them are very large

16 Built by Captain John Montresor at the order of Colonel Bradstreet.

17 Length 241 miles, breadth 57 miles.

18 Long Point, near Port Rowan in Norfolk-Elgin County, Ontario. Its base is nearly opposite Erie, Pa. (Presqu' Isle), but it extends less than 20 miles into the lake.

19 Point Pelee.

& are all fertile in fruits, wood, & hay, &c., all swarming wt snakes. Several of them I have visited myself tho' they ly 20 Miles of the North Shore. The navigation of Lake Erie is very good for vessels. Amongst the Islands, Presq'isle, the grand pt, & rivers, &c make excellent harbours upon occasion, & there is regular soundings wt a fine soft bottom all over the lake from Fort E. [Erie] to ye G. Pt. [Grand Point], about 90 fath; thence to the Islands about 15 & has a gradual ascent from the middle to each shore, & thence variable to the river's mouth.

The enterance of Detroit river is 3 m in bredth for 5 Miles up including several fine fertile Islds, one of which, inhabited by the Hurons, is 9 Miles long & 2 broad.²⁰ The large meadows all the way on each side the river to the beginning of the French Settlemt., 10 Miles from it's mouth, are exceeding plaisant. From these & the meadows on the small rivers falling into here, the French make all their Hay; but the making of hay for the maintainance of many thousand Cattle would scarce be seen from whence it was taken.

From the first or lowermost Inhabitants to Detroit is 8 Miles, the river $\frac{3}{4}$ Mile broad, from 7 to 10 fathom deep & a smooth Strong current. [2 Miles below the fort on the Same Side is the Poutewatamy village. It has but few Standing houses, they erecting new ones alway on occasion, as all Indians leave this [place], some to greater, some to lesser]²¹ distance to winter. On the other Side the river, right opposite, is the Huron village, which is pretty large with good square logg houses regularly built. They have long had a Jesuit for their preacher,²² & they have now built a good Church. Their fine Corn fields are extensive & Plaisant & show the industry of the people.

3 Miles above the fort on the opposite side the river is the Ottawa village, for the most part built occasionally also.²³ The Chippewas, who are more numerous than all the others, have no settled villages here but their fields here & their among the French farms. They encamp irregularly from the fort up to the Grosse point, 12 M. up the river on the same side. The fort, standing upon a gentle ascent, is nearly a square of about 300 yd, excluse of the bastions, &c., has 3 Gates, 4 parallel & 3 Cross Streets, about 80 Houses, a Church, &c, with a small Square for a place of arms.

20 Grosse Isle.

21 The material enclosed in brackets was stricken out in the Ms. This village was in the vicinity of the present 21st and 24th streets, on the shore of the Detroit River, just below the Detroit approach to the Ambassador Bridge.

22 Father Pierre Potier, in charge of the mission at Sandwich; it had been moved there from Bois Blanc (Bob-Lo) in 1748.

23 On the mainland opposite the lower end of Belle Isle.

It is not my intention to discribe at present the Canadian manner of building, of life, of dress, &c. Shall only remark their way of Settlemt is much more plaisant & less convenient than ours. They first lay out a public road as near the river as possible, then build all close on the side thereof, & as the breadth of their lands are only 1, 2 or 3 Square Acres in front,²⁴ running right back like a ridge (in this place as far as they please), and sometimes Several families on an estate, the build-ings are so very near one another that at some distance it appears like a continued town or village. The number of rail fences in this way is incredible, every farm being either divided in two or has an enclosed road back to the woods, besides the cross fences for One two or more miles.

The soild at D. [Detroit] is exceeding fertile for Grain, fruits, & grass, &c.; & the woods around in all kind of fruit natural to the Climate & hitherto Strangers on our passage; as, Grapes, Cherries, plumbs, apples, &c., with many kinds of nuts & berries; & particularly a small Spice²⁵ of which I have not heard in any other part of America. When ripe, it is a red berry about the Size of a small pea, & grows upon a sml Shrub from 4 to 6 Inches high, & when dried is about the Size & Colour of a grain of Blk pepper. It has a pulp in Substance much like that of thorn haw with a thin shell'd Stone, mostly hollow. Its pulp when chew'd resemble nearly the escence of Lemons & gives a delightfull flavour; but when the Stone is broke, its flavour is quite aromatic, & its heat greater than pepper. Tho' Pleasant, the chewing of a Single grain will continue 2 or 3 hours warm in the mouth. When Steep'd in Spirits it makes more delicious pounch than either robe [rose?] or escence of Lemons with a certain proportion of Shrub,²⁶ which is the only use we apply it to, it being rare. Tho' I have em-ploy'd the Squaws several times to gether it, I never could amass any quantity worth while.

Anor. blessing this pleasant place is endow'd with, is the Paintg root, or the lady's companion.²⁷ It is almost like a dock root, & by spitting upon the cut or broken end of it & rubbing it on the skin, it leaves a most beautiful ruddy colour & will not fade until rubb'd of

24 The French "arpent" (less than an acre) was 192.24 feet square. The width of the farms was usually from one to four arpents. They were a mile and a half or more in depth.

25 "Undoubtedly Dwarf Cornel, sometimes called Cracker Berry, the Latin name *Cornus canadensis*." Professor H. T. Darlington, Department of Botany, Michigan State College.

26 A drink composed of fruit juices and spirits.

27 The "so-called Painting Root, seems to be Hoary Puccoon, *Lithospermum canescens*. This plant is also called Ascanet. The root was used by the Indians to paint their faces red . . ." Darlington.

by wet or sweating, & has this sovereign qualification that it does not hurt the complection like the paint so much used by the generallity of the French Ladies. I am of opinion, were this root easily procured, many of our English Ladies would not be against assisting nature sometimes by the use of it.

From Detroit to the Grosse point, or enterance of Lake St Clair, is 9 Miles. Between the fort & pt. are two Islands, Isle Couchon²⁸ is 2 Miles in Length, near 1 in breadth. Lake St Clair is mostly of a round figure & 30 M. across. The Huron river,²⁹ which falls into this Lake, is the most delightful I ever saw. It is 36 Miles in length; its current is middling strong but gentle, its banks exceeding pleasant; & a vast tract of very fine meadows divide it into 23 Channels in falling into Lake St Clair, below which is a bank of Sand running across the whole Lake,³⁰ havg. only from 4 to 6 feet water, over which the Michila [Michilimackinac] vessel was haul'd on broad side, & always comes down here to be loaded by vessels or boats from Detroit.³¹ & [it spends] the winters in a small river 12 M. below the Mouth [head] of H. [St. Clair] River; which Little post is call'd fort Sinclair.³² The Chip. have Several villages on this river & live very happy in a plentiful Country for all kinds of game. The ground is level, the soil fertile, & the little rivers emptying themselves herein are extreme agreeable. Above Ft S. is a pinery from which D. [Detroit] & all the Settlemt. is built, the timber being all carried down on rafts.³³ This Swamp afords excellent

28 Ile aux Cochons or Hog Island, now Belle Isle. The other island, which the writer does not name, is Peach Island, formerly Ile la Peche (Fish).

29 It is obvious from what follows that Porteous meant the St. Clair River.

30 A report on Upper Canada in 1800 taken from the Canadian Archives and printed in the *Michigan Pioneer and Historical Society Collections* XV, 11, locates this sand bar exactly: "the mouth of the river (Clinton), tho not within gunshot, has a full view of the Bar on Lake Sinclair [St. Clair]; between it & the Bar there's a long and very narrow channel, thro which all vessels of necessity pass . . . on the Bar, there are but six feet of water; a vessel drawing more must take a lighter in company." A map drawn in 1812 or 1813 shows the bar in the same position. Boats in the early days used what is now called the North Channel.

31 "In June 1768 I left Michillimackinac, and returned in the Gladwyn Schooner, a vessel of about eighty tons burthen, over Lake Huron to Lake St. Claire, where we left the ship, and proceeded in boats to Detroit . . . towards the middle of Lake St. Clair there is a bar of sand, which prevents those [vessels] that are loaded from passing over it. Such as are in ballast only may find water sufficient to carry them quite through; the cargoes, however, of such as are freighted must be taken out, and after being transported across the bar in boats, re-shipped again." Jonathan Carver, *Three Years Travels Through the Interior Parts of North America*, p. 71. Philadelphia, 1784.

32 Written also St. Clair. It was built in 1765 by Captain Patrick Sinclair, where the Pine River enters the St. Clair River. The town of St. Clair now occupies the site.

33 This pinery was bought from the Indians by Captain Sinclair in 1765. Timber was cut here for many years.

pine & sufficient for Masts for any vessels. The Mouth [head] of H. [St. Clair] river is narrow & rappid, but above 20 fathom deep & runs 5½ Miles an Hour.

You must not expect a particular acct. of the Coasts of L. Huron as I crost it in the vessel, without seeing Land until we came near this place. The west Shore or way from D. [Detroit] is an entire pine wood, a barren Soil except where rivers fall into the Lake, a Sandy beach & Shoal a great way out in many places with several little Islas near the land or within the bays. The east side of the lake is much in the Same barren comfortless condition; but all the north Side is a perfect Paradise of Islands, part of which I have Seen may afterwards find occasion to communicate the discription of it to you, with that of a Short voyage I made from this place.

Michilimakinac is Situate on [a large cape which form the]³⁴ Southern [side of the]³⁴ Straits between the Lakes Huron & Michigan, has Lake Huron on the E. & S. E., and on the S. and W., Lake Michigan, Lat. 46° 18',³⁵ Long. 85°. This post was first established upon an Isld on the E. entrance of the Straits, from thence moved to the east point of the northern cape, and afterwards moved westwards, about 2 Miles, about the middle of the Straits; & in the year 1717, by request of the Ottawas whose village then stood here, was again moved over where it now stands to protect them from some of the Nations they were then at war with.³⁶ Soon after which their Village was burnt & they rebuilt it 32 Miles from this on the side of Lake Michigan.³⁷ The fort is a Stockade nearly square 110 yards in length, has 2 Gates, a Square, & Several lanes; contains a Church & Houses. It stands on a dry barren beach; the Soft small sand surrounding it for some distance is intollerably troublesome, both for filling the Shoes & blowing in the eyes, & crevices of houses & vessels, &c. [but its extensive prospect towards the water is agreeable enough.]³⁸ The Cape whereon the fort Stands is 3 Miles in breadth right against the opposite Cape, which is 4 Miles in breadth from E. to W. On each side thereof the distant Continent Links the prospect into the watery horison. West of the Streights is

34 The words in brackets were stricken out; but since they seem necessary for the sense of the sentence, they have been retained.

35 Porteous first wrote 45° 20'. It is about 45° 45'. Longitude is about 84° 44'.

36 Fr. Dablon established a mission on Mackinac Island in 1669. In 1670 Father Marquette moved it to the northern cape, St. Ignace. A military post was also established there. It was abandoned after Cadillac drew the Indians away to Detroit. Later the post was built on the southern cape, where Mackinaw City stands.

37 L'Arbre Croche, near modern Harbor Springs.

38 Stricken out in the Ms.

Isle St Helena, 9 Miles from the fort; & on the Lake Huron side are 2 Large & 1 small Isld. 8 and 9 Miles from the fort.³⁹ The Streights are 6 Miles in breadth. These together yield a pretty enough prospect for navigation. The depth of the water in general is about 18 & 20 fathom in the Streights, but considerably deeper on each side till bottom is lost in the lakes.

The Soil is barren, dry & sandy, neither very fit for grain, nor Luxuriant in Grass, tho' the old Indian fields at 2 & 3 Miles distance yield abundance of fine Summer pasture, nor is it a kind soil for Garden vegetables. Yet it is not without beauties & valuable productions. Around the fort at a small distance the ground produces innumerable kinds of trees & Shrubs, beautifully intermixed & deversified with the finest lawns, walks & avenues imaginable, far exceeding all art I ever Saw of the kind. Many of them has their Sodd as smooth, & grass as fine & in short as any bowling-green, & the variety of surrounding Shrubs impenetrable except a small path, which with much ado can be enter'd; but the pleasures in walking these Silvan Scenes are not all, for the trees & plants which produce them are some of the most useful, both for daily use & medicine. Here are three or four kinds of the Spruce pine, one of which is the best for making beer of any on ye Continent, as far as I can learn, & can only be equall'd in Newfoundland. Anor. of them is reputed & experienced by the French here an infallible cure for the most inveterate Scurvey, & indeed all Spruce is reckoned a good antescurbutic, either in decoction or beer. Within these 2 years the beer is become the most usual table drink in all our provinces, being first brot into practice in the army by Genl. Amherst in some of his Campaigns.⁴⁰ The Sapp in another kind of the Spruce here produces in abundance the famous balsom of Canada, sometimes worth a Guinea a Bottle.⁴¹

The next I shall mention is the Mapple or sugar tree, being the Stapple manufacture of this place. The Mapple grows spontaneously all over N. A. [North America]. None cultivates its production more than the French inhts here, which the Climate & seasons abundantly favor. The Sugaries here are 6 & 10 Miles from the fort, where the families go & live in huts for about 2 Mos in the Spring. Then, at first approach of the thaw, they Cut a notch in the tree, with a small Chip to throw out the water into a small trough set under. Then, as it thaws in the day & freezes at night for 5, 6, or 8 Weeks here in the Spring,

39 Mackinac Island, Bois Blanc Island, and Round Island.

40 During the French and Indian War.

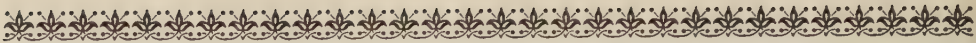
41 A transparent liquid resin obtained from the balsam-fir, used in medicines, and also for making varnish.

during which time the trees still run in the day, especially while there remains any snow on the ground. Its toil & slavery are incredible. They are obliged constantly to attend & carry the water in the day into larger recevoirs of skins & boil it into a Consistency like Molasses, in the night; otherwise the water would Soon spoil. But when thus boil'd, they may keep it till leisure permits their further boiling it into Sugar. One familie will have 16 or 18 hund. trees running, & if the Spring is Slow, they can make 6, 8, or 10 hund. pounds of Sugar as fine & dry as any I ever saw except refine. The Indians make abundance of it everywhere, but neither to [so] Clean nor fine as the French here, & I have frequently bot it at the rate of three half pence [illegible] a pound.

The Cherry tree next excites attention; here are two sorts, one I never remember to have seen. It Carries a Cluster of Grapes like the vine, but they have the Stone hard, & taste & Shape resemble a small Cherry;⁴² the other, I imagine, is the Same with the Small Sort you Call Geens,⁴³ & grow up in such abundance that for Miles together one would imagine it an entire Cherry orchard loaded with fruit in their season. There is anor. sort of blk [black] Cherries, much Larger, that grow on small bushes like willow & are call'd Sand Cherries. Of these you can fill your hand at every pull. In many places there is also several Sorts of pine, & other barren Woods of most kinds in this neighborhood, & the woods are all overgrown with gooseberries, Currans, Strawberries, raspberries, &c. &c. &c. in amazing quantities; besides, numberless Siple medicinal Shrubs are found here in great plenty, a detail of which I shall forbear to mention.

42 "Undoubtedly . . . our Wild Black Cherry, *Prunus Serotina* and probably *Prunus Virginiana*, Choke Cherry." Darlington.

43 Gean—a common wild cherry of Europe.



The Light That Shone for a Hundred Years

By PEARL E. KILLINEN

FROM 1825 TO 1925, the beacon on the hill at Fairport Harbor, Ohio, at the mouth of Grand River, beamed its friendly message to mariners of the Great Lakes and beckoned them to enter one of the best natural harbors on Lake Erie.

Originally built of brick in 1825 by Jonathan Goldsmith, and rebuilt in 1845, the tower was rebuilt for the second time in 1871 of standstone blocks on a foundation 40 feet deep. Whale oil was the first fuel used in the fixed white light which could be seen for 17 miles at sea from its height of 90 feet above the lake level.

The beacon, being guardian of one of the northern terminals of the Underground Railway before the Civil War, silently guided runaway slaves to their new homes in Canada.

During its years of active service, the beacon witnessed the transition of lake shipping from colorful sailing ships to the modern ore, coal, and stone freighters which enter the harbor daily.

There was a great possibility during its earlier days that the harbor would be a port greater than Cleveland, but Cleveland secured the terminal of the Ohio Canal, and due to the panic of 1837, Fairport's prospects as a rival soon waned. Considerable activity remained however, and ship-building became one of its important industries. Many a proud schooner was built or rebuilt at Madison Dock, Mentor Headlands and Fairport. Gradually the volume of lake commerce increased and Fairport's outlook became brighter in the late 1840's and early fifties. After this there was another decline due to the establishment of a railroad between Cleveland and Ashtabula.

In 1886, the beacon witnessed the coming of a new activity which held great promise for the future. About this time, representative ore men of Pittsburgh, headed by Henry Oliver, a well known ore dealer, began an enterprise which developed the harbor facilities at Fairport, and commenced constructing docks, installing machinery for handling ore and coal, and made other general improvements. This enterprise was later to be known as the Pennsylvania & Lake Erie Dock Company, which handles extensive iron ore shipments from Lake Superior regions to the steel mills in and around Pittsburgh and Youngstown.

The beacon proudly stood by and watched the development of this new industry in its port. For with the coming of iron ore shipments, other industries followed. The coal fields of Ohio and Pennsylvania found Fairport a convenient shipping center for their product. A coal dock was constructed for this purpose and has been in continuous operation. During the present time this dock is operated by The Toledo, Lorain & Fairport Dock Company. Considerable package-freight was handled at this port and grain from the mid-west was sent here for disbursement to points inland. In later years, The Diamond Alkali Company of Pittsburgh located its great chemical industry in Fairport and established its own dock to facilitate the handling of limestone and chemical products.

With the coming of these new industries, new piers and beacons, breakwaters, and foghorn were installed and the river channel deepened and widened to accommodate the modern freighters. The turning basin was also deepened and widened to enable easier departure from the harbor. Present day lake captains consider this harbor one of the easiest to enter.

The beacon too, in the sturdy old lighthouse, was due for a change. In 1925, after a hundred years of faithful service, it was found more practicable to place the main harbor light atop the new foghorn station located on the west breakwall about a mile from the shoreline.

The old sentinel on the hill was no longer needed. Condemnation proceedings were started by the government authorities and the village came near to losing this beloved landmark. Through the efforts of public spirited citizens, it was saved as a historical monument and then allowed to rest quietly on its laurels for 20 years.

In 1945, a new kind of glow began to emanate from the old lighthouse which inspired the citizens of Fairport Harbor to action. On March 2 of that year, representatives from all civic, social and cultural groups met at their village hall and organized The Fairport Harbor Historical Society. Its purpose was to preserve and perpetuate historic tradition and sentiment in Fairport Harbor and the Great Lakes area. Its objective was to establish a marine museum in the historic lighthouse dwelling which adjoins the tower. Thus all marine relics, documents, records, maps, pictures, books and authentic ship models would have a permanent and appropriate home.

Now in March 1946, on its first anniversary, the Fairport Harbor Historical Society announces plans for the formal dedication of the museum July 2nd. The dedication will take place at a dinner meeting to be held at the Suomi Zion Lutheran Church in Fairport Harbor.

During the past year all the work of collecting, assembling, catalog-

ing, and displaying has been done by a staff of volunteer workers and officers of the society. Though handicapped by limited funds and war-time restrictions on equipment, the work has progressed satisfactorily. Much encouragement has been received from retired lake captains and steamship companies. During the formation of the project, Mr. A. O. Beamer, Executive Secretary of the Lake County Chapter of the Western Reserve Historical Society, gave the group valuable guidance.

The July 2nd dinner will also launch the sesquicentennial celebration at Fairport Harbor, which will be held at Fairport beach from July 3 to July 6 inclusive.



The Herring Fishery of Lake Erie

By THOMAS H. LANGLOIS

COMMERCIAL FISHING operations in Lake Erie shifted about 1850 from small-scale seining operations near shore to extensive pound-netting in the western part, and to gill-netting in the eastern part of the lake. First conducted with rowboats and sailboats, the business grew in magnitude with the use of steam tugs about 1900, and further flexibility and capacity were attained with naphtha, gasoline, and diesel motors. The fishing gear was made more efficient by the invention of crib-nets about 1900, though the other kinds are still used in those regions which are best suited to their individual characters. Gill-nets are used principally in the deeper waters of the east end, pound-nets in the shallow water and on the soft bottom of the north shore of the west end, and crib-nets in the shallow waters and on the hard bottoms of the south shore of the west end.

The kinds of fish which occur at various places around the lake are those best adapted to the specific local conditions, so the varieties which are caught by the several kinds of fishing gear are fairly distinctive. The blue-pike and herring are most abundant in the east end where the gill-nets are most extensively fished, while the yellow pickerel, sauger, perch, sheepshead, and whitefish are most abundant in the west end where the pound-nets and crib-nets are most commonly used. There is known to be migration of some species from one end of the lake to the other, and there is even some reason to suspect that some interlake migrations may also occur. There have been extensive migrations of many species of fish from the lake up into the tributary streams for spawning purposes, and the young fish, hatched upstream on the riffles, have drifted down into the once-heavily vegetated bays where they have lingered in safety until they have attained some size before venturing out into the open lake.

The total catch of fish out of Lake Erie has varied greatly from year to year since the start of the industry, with a continuous succession of high and low years. Every peak of production has been due to an uncommon abundance that year of one species of fish. The blue-pike has accounted for many of these peak years, and continues to do so, having been uncommonly abundant in 1944. The perch has accounted

for several of these peaks, and the yellow pickerel has been responsible for certain peak years. So also has the herring, which, after passing through an all-time low, returned to real abundance in 1945.

Herring abundance has varied greatly from the beginning of the fishery, and obviously not from the intensity of fishing efforts. Discarded as soft fish by the very early fishermen, they became valuable only about 1880, with the use of ice and salt for preservation, and for some time the fishermen returned much of their catch for lack of market. In 1885 the Ohio fishermen caught fifteen million pounds of herring, and the catch jumped to twenty-eight million pounds in 1889 and in 1890, but in 1903 the catch dropped to only one and one-half million pounds. From that year through 1922 the catch varied between two and eight million pounds by Ohio fishermen, and between eight and three-fourths million pounds in 1903 to forty-nine million pounds in 1918 by all fishermen on the lake. It is noteworthy that there was no concern about overfishing when the catch reached its all-time high, nor any evidence of overfishing in the high production of the following six years.

The bottom dropped out of the herring fishery in 1925, when the catch fell from the thirty-two million pounds of 1924 to a paltry five and one-half million pounds. Since then the decline has continued year by year to a low point of 146,800 pounds in 1936, but it went up in 1939 to 2,690,100 pounds. Thereafter, it dropped again to reach a new low in 1943, before it bounced back to several million pounds in 1945. Naturally, the absence of herring has given an economic jolt to the gill-net fishermen at the east end of the lake, since they had been most dependent upon that species and these people, in desperation, have been ready to sponsor any measures proposed for the restoration of the herring catch.

Varying abundance involves two-way changes, not just one, namely, increases as well as decreases. Adequate consideration of the causes of varying abundance rejects the easy assumption that the decrease is due to overfishing because overfishing cannot explain the highly significant and most desirable increases. The record of rises and falls which have characterized the herring abundance from the start of the fishery indicates that herring abundance is due to other factors than the numbers of fish removed by fishermen, and that these factors must be the environmental factors which promote or discourage the successful production and survival of young herring.

Some facts are known about the life history of the herring which help to explain how the environment can influence its welfare. For instance, herring have a great reproductive capacity, one 16-inch female yielding

30,000 eggs. Herring migrate in the autumn to spawn, moving in a school from deep to shallow water, and once over shoals they pair in mid-water as they swim, dropping their eggs to the bottom. The eggs must live in clean, circulating water all winter, hatching after about 115 days to emerge during the first week of April in Lake Erie. The newly-hatched herring begin feeding at once upon the small floating plants and animals in mid-water, and this plankton forms the principal food supply throughout its entire life.

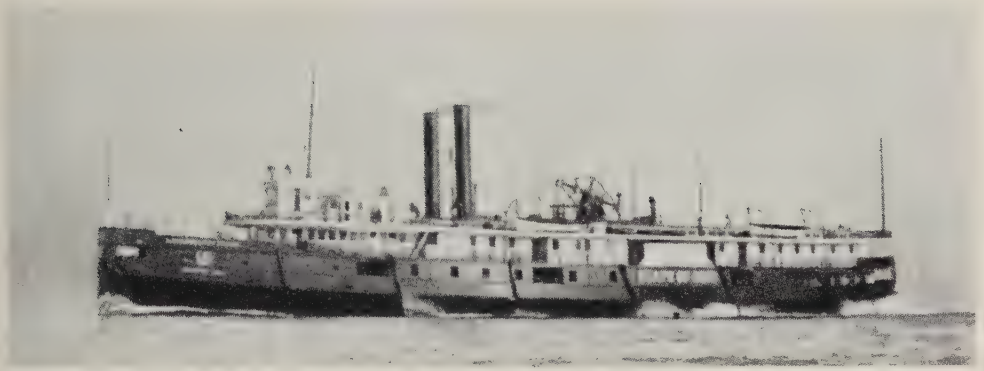
Many facts have become available about the variations of certain features of Lake Erie as an environment for fish as a result of the program of continuous research which has been carried on at the Franz Theodore Stone Laboratory, at Put-in-Bay, since 1937. Specifically, the abundance of plankton organisms at the spring time of year, when young herring are absolutely dependent upon an abundance of plankton, has been found to vary tremendously from year to year. This abundance can be expressed in terms of percentage of abundance of the maximum amount yet found, which occurred in 1941, as follows: 1939—14%; 1940—23%; 1941—100%; 1942—16%; 1943—8%; and 1944—78%. Moreover, the actual dates of abundance have varied greatly, with abundance persisting for prolonged periods and so being available for use by young herring only in some years, and with the pulse terminating abruptly before the period of herring fry need in other years.

The Stone Laboratory limnologist, Dr. D. C. Chandler, has also found that these variations in plankton abundance have been associated directly with the amount of sunlight which penetrates the water, which is understandable, since even small plankton plants must have sunlight. Chandler has also found that the amount of sunlight which penetrates the water is limited by the clearness or roiliness of the water, and that the turbidity of the water throughout the entire west end of Lake Erie, the key area which determines the productivity of this lake as other key areas determine the productivity of other lakes, is correlated directly with the discharges of the west end tributary streams.

The herring is the species in Lake Erie which is most susceptible to this kind of change of environment because of its lifelong dependence upon plankton for its food supply, and the herring is the only commercial species which has shown this extreme response to a variable environment. The clear water and abundant plankton in the spring of 1944 offer the only logical explanation for the great herring abundance in 1945, and, significantly, scale studies have shown that about 98% of the herring caught in 1945 had been hatched in the spring of 1944. It is noteworthy that this abundance was derived by the successful

reproduction of a very small brood stock, and that the environmental conditions favored a high survival rate of the young then produced.

Some conclusions are inevitable. 1. A small brood stock is able to repopulate a lake with a fish species like herring which has a high reproductive potential. 2. The abundance of herring in Lake Erie is determined by certain environmental factors which influence the survival of young herring, namely, plankton abundance, turbidity, and stream discharges. 3. The herring has not been, and perhaps cannot be overfished. 4. The only way to restore the herring of Lake Erie to continuous, dependable abundance is to improve its environment by preventing turbidity. Soil erosion of the farms which drain into Lake Erie cannot be prevented even by an international agreement.



THE STATE OF OHIO.



THE STATE OF NEW YORK. These were the first two steamers operated by the C & B line. (See Page 76.)



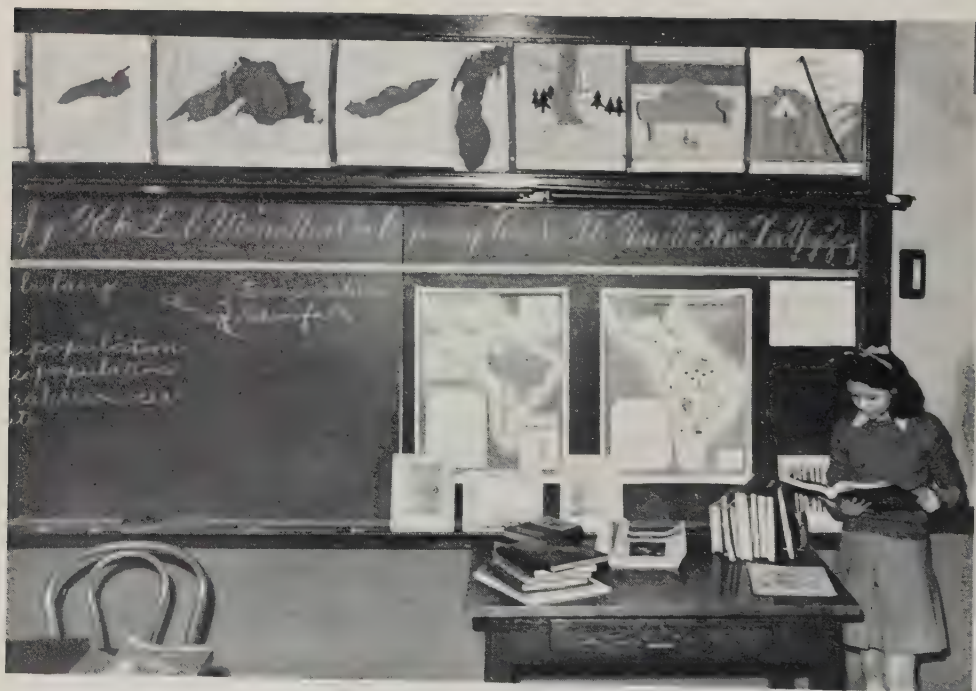
U.S.S. WOLVERINE, Great Lakes training ship, formerly the *Sealandee*. (See Page 78.)



OLD FRESNEL LENS, tended by Chief Boatwain's Mate John J. Hahn in the lighthouse at Eagle Bluff, Green Bay, Wisconsin. (See Page 128.) U. S. Coast Guard Official Photograph.



CAPTAIN WILLIAM T. BRIGHT (See Page 113.)



GREAT LAKES PROJECT, Oliver Wendell Holmes School, Cleveland, Ohio. (See Page 118.)



THE WISCONSIN, sunk in the storm of October 29, 1929. Photograph by courtesy of George A. Vargo. (See Page 128.)



THE CAR FERRY CITY OF MILWAUKEE, sunk with 52 men aboard in the storm of October 22, 1929. Photograph by courtesy of George A. Vargo. (See Page 127.)



WHAT A SEICHE CAN DO in a Southwest Gale. Grand Island, Munising, Michigan, August 19, 1921, 11:30 a.m. Photograph by R. A. Brotherton.




WHAT A SEICHE CAN DO. Same scene, 20 minutes later. Photograph by R. A. Brotherton.



HOME OF FAIRPORT HARBOR HISTORICAL SOCIETY Marine Museum at Fairport Harbor, Ohio. (See Page 98.)



T.S.S. VANDALIA. From the Robertson Collections. Reproduced by permission of the Toronto Public Library. (See Page 123.)



That Grand "Old Man" *Captain William T. Bright*

By THOMAS B. DANCEY

IN THE HISTORY of our Great Lakes shipping, the lives of the men who have commanded the vessels are of equal interest to that of the ships themselves. The life story of Captain William T. Bright is of more than usual interest. His fifty-seven active years sailing the Great Lakes, thirty-nine of them as master, covered the period of final transition from sail to steam, followed by the peak of the passenger vessel trade. The list of ships in which he received his early training, and those which he later commanded, reads like a roster of some of the most famous lake ships of the past three quarters century.

Not only is Captain Bright an interesting character on the basis of his record, but also on account of the manner of the man. He is known over the chain of lakes as a strict disciplinarian of the old school, yet unvaryingly fair. His clean record stands as evidence of his skill in the handling of steamers and men. His quick sense of humor and ability to tell a story to perfection made it an enlivening experience to sit at his table, or to be in his company at any time. In fact, he is the personification of the ideal passenger skipper, immediately inspiring confidence and radiating good cheer.

Captain William T. Bright, the son of Thomas Bright, was born at Sand Beach, Michigan (now Harbor Beach). At the age of ten he was left an orphan and thrown on his own resources. Three years later he had his first experience on the Great Lakes when he shipped on the schooner *Seaman*. The *Seaman* was a medium sized ship for those days, 120 feet in length, and had been built in Cleveland in 1848. Captain Charles Crane was the skipper and the first trip was from Sand Beach to Chicago. "Billie" Bright arrived just in time to be a witness to the Haymarket riots.

The following season he joined a larger schooner, the *Maria Martin*, 175 feet in length and built in Cleveland in 1866. Captain William Foster was her master. Later, the future captain was in the *Annie M. Peterson*, one of the finest schooners on the lakes. She had been built in Oswego, New York, in 1874, and was of good size, 190.5 feet in length by 33 feet beam.

At the age of eighteen, after five years in sail, "Billie" Bright started "steamboating." His first steamer was the *Maine*, followed by the *Arizona* and *Spokane*. Upon reaching his twenty-first birthday he obtained his original pilot's license and joined the Gartland line in the Ogdensburg trade. While in this line he served in the *Governor Smith*, *James R. Langdon*, *William J. Averell*, *Walter L. Frost* and *Alexander McVittie*.

In 1902 Captain Bright was appointed to his first command, the old Steamer *Puritan* which had been built in Benton Harbor in 1887. This ship is not to be confused with the later *Puritan* which was built in Toledo in 1901. During the season of 1903 Captain Bright was master of the *Argo*, and of the iron ore carrier *William H. Gratwick* in 1904 and 1905.

His next assignment was the steamship *Manitou*, one of the most famous of the Lake Michigan passenger ships. This fine ship had been built in Chicago in 1893 and was designed for the passenger trade exclusively, no freight whatsoever being carried. Over a period of almost four decades she maintained, with express train regularity, a tri-weekly service between Chicago, Glen Haven, Charlevoix, Harbor Springs, and Mackinac Island. She was well known to lake men of her day for her graceful lines and high speed. Captain Bright was sailing the *Manitou* at the time of her purchase by the Northern Michigan Transportation Company in 1906. Captain William Finucan was the ranking master of the purchasing line and accordingly took over the *Manitou*, Captain Bright being appointed to the *Missouri* of the same line. Captain Bright rejoined the *Manitou* in 1922 following the death of Captain Finucan.

One of Captain Bright's closest approaches to a serious accident came shortly after this. The *Manitou* was on her usual run and a woman passenger was taken violently ill. There was no doctor aboard ship and it was deemed most necessary that she receive medical assistance promptly. Top speed was signaled for and the course changed toward Frankfort, the nearest port. As the ship squared away entering Frankfort piers a heavy jar was felt by those on the navigating bridge. The chief engineer called the pilot house saying that the ship had thrown her propeller. Anyone who has had the experience of approaching a red traffic signal, and upon applying the brakes finding that they had failed, can well imagine the captain's feelings at that moment.

Fortunately, radio advice had been sent ahead that the *Manitou* was coming in with a sick passenger and the coast guard was on the lookout for the ship. With the prompt assistance of the coast guardsmen, lines were taken on the north pier and the propellerless ship was

snubbed to a stop abreast the coast guard station. A few feet more and the *Manitou* might have found herself high and dry on the tracks of the Ann Arbor Railroad at the entrance to Frankfort harbor.

On the morning of July 24, 1915, Captain Bright docked the *Missouri* at the Northern Michigan Transportation Company dock on the north side of the Chicago River immediately below the Michigan Boulevard bridge, and went to the customs house. In those days it was necessary to report and clear Great Lakes vessels through the Customs, even though their voyages had not included a Canadian port. Returning to his ship he was overtaken by Mr. E. W. Seymour, General Manager of the line, who excitedly informed him that the passenger steamer *Eastland* of the Indiana Transportation Company had just rolled over at her Clark Street dock with a capacity load of excursionists. The captain hailed a passing taxi and dashed to the scene of that most terrible disaster in the history of our Great Lakes shipping.

It was found that the crowds in the vicinity of the ill-fated vessel were so dense that it was impossible to see what was taking place, or to do anything to assist in disembarking the panic stricken survivors. Captain Bright managed to fight his way into one of the commission houses which in those days lined Chicago's South Water Street (now the beautiful Wacker Drive) and was able to reach a second story window facing on the river and immediately overlooking the capsized steamer. The once proud *Eastland*, now a death trap for hundreds of souls, was observed to be on her beam ends, the starboard side out of the water and the port side submerged. From the starling of the bow to the stem, as she lay, it was very steep and slippery. A score or more of policemen and others were attempting to assist passengers down the treacherous descent and to hoped-for safety on three harbor tugs that had pulled alongside. Nearly everyone so trying to escape slid off into the mucky waters of the Chicago River. Some were able to reach safety, others were injured by their fall, and many were drowned on the spot and under the eyes of the helpless onlookers.

At once sensing that additional lives were being needlessly sacrificed, Captain Bright sung out to the rescue party that ashes be taken from the fire holds of the three tugs and sprinkled over the bow of the *Eastland*. At the same time he placed an emergency phone call to Marshall Field & Company, a few short blocks away, and instructed them to rush fifty blankets to the dock. Upon arrival the blankets were spread on the bow of the *Eastland* and from then on no one fell to the river below.

Although a terrible toll of eight hundred and thirty-five persons was taken that morning, the number of those lost would have been even

greater had it not been for the quick thinking and prompt action of the captain of the *Missouri*.

During several winters Captain Bright sailed the *Illinois* of the Chicago, Racine and Milwaukee Line (a division of the Northern Michigan Transportation Company). At one time it took him two weeks to complete a trip from Milwaukee to Grand Haven due to severe ice conditions. In January 1920 he was fast in the ice for eight days just off Chicago Harbor.

The steamship *Minnesota* was under the command of Captain Bright during 1916, 1917 and 1918. The *Minnesota* had formerly been the package freighter *Harlem*, built at Wyandotte in 1888. As a package freighter she was considered the fastest on the lakes in her time and had been owned by the New York Central Railroad. She was wrecked on Lake Superior, following which she was rebuilt and made into a passenger ship at Manitowoc.

In 1918 the government requisitioned the *Minnesota* for service as a hospital ship in World War I. Captain Bright took her to Buffalo where she was cut in half and bulkheaded in preparation for her trip through the Welland and St. Lawrence River canals. The sections were rejoined in Montreal and the captain delivered her to the government in New York. The *Minnesota* never returned to the Great Lakes.

In 1926 Captain Bright joined the Chicago, Duluth and Georgian Bay Transit Company. For twelve years he sailed the *North American* and later the *South American* until his retirement in 1941.

On June 23, 1934, the captain was most highly honored by his receipt of the National Safety Council award for fifty years service, thirty-three of which were as master, without a major accident or loss of life among passengers or crew. In 1938 he was again honored by his election to the post of Grand President of the International Shipmasters Association.

The writer had the privilege of serving as junior wireless operator on the *Missouri* with Captain Bright in the fall of 1920. The *Missouri* was a happy ship and well managed. Her master had the full respect and admiration of her crew. In September of last year the captain stepped for a time from his retirement and came from his home in Chicago to act as pilot on the *South American* on several post season trips from Cleveland to Ogdensburg. It was a pleasure for me at that time to find that my youthful memories had played no tricks and that the old skipper was the same "Grand Old Man" that I had sailed with twenty-five years earlier. A friend to be sure.

Indicative of the esteem of the men who served under Captain William T. Bright is the following, which appeared in the *Daily Radio*

News of July 15, 1938, published on the *North American*, the day that the captain left that ship to take over the *South American*.

“GOODBYE, OLD MAN”

Well, Old Man, they're taking you away.
We don't think you want to go.
But there are times when duty calls
Even Captains can't say “no.”

The *North* has been your home and ours
For many a summer past,
But time and tide for no man wait,
And now, you've sailed your last.

The *South* may be a larger ship
With, perhaps, a larger crew
But none with hearts so fond as ours
For a Captain the likes of you.

Your cold blue eyes and very stern look
Have fooled us many a time;
And your frigid glare and keen-eyed stare,
But we knew it was just your line.

You've played the part of the Grand Old Man
In weather both foggy and fair,
While under your bridge we've slept so sound,
Because we knew you were there.

When the Great Commander took Rockne away,
Only his body had gone;
For the good he had done in his humble way,
In his spirit lives on and on.

He had fought the fight up through the ranks
And made his place in the sun.
The whole wide world loves such a man.
That place you, too, have won.

So when you leave us, rest assured
That we'll carry on for you,
With Captain Harreutt as our guide,
A man, the likes of you!

As ever,

Your crew.

(Anonymous.)

(*Author's Note*—The term “Old Man” as used by sailors is in no way disrespectful or a mark of age. It is the sailor's way of speaking of the skipper, not to him, and most generally is a mark of respect and affection.)



The Great Lakes in the Classroom

By A. WINIFRED ELLIOTT

ONE DAY this winter Mr. Clarence Metcalf, Executive Vice-President of the Great Lakes Historical Society, with the Managing Editor of *INLAND SEAS* visited a school where a teacher, inspired so she says by the Society and by *INLAND SEAS*, had developed a project on Great Lakes history. The classroom was humming with activity of children completing the pictorial cut-out border fifteen inches wide which ran around three sides of the room. (See page 108.) Here in gay colors and graphic scenes was the history of the Great Lakes depicted in chronological events. The children had selected important epochs in the progress of Great Lakes history, drafted lay-outs of these events and with colored papers made the completed picture.

Miss Elliott herself has long been enthusiastic about the lakes and is an early member of the Great Lakes Historical Society. Her father was a home missionary who established and built churches on the shores of Lake Superior and Lake Michigan. She recalls as an early memory that as a child she took delight in perching on stumps of trees cut down by her father to make a clearing for a church or parsonage and preaching herself to the close-by waves.

Such teachers, and projects such as this which dramatize and make history real to young people, earn the approbation and support of the Great Lakes Historical Society in its objective of furthering knowledge of the Great Lakes. — *Editor.*

THIS FALL a class of upper elementary children in Oliver Wendell Holmes school in Cleveland, Ohio, began their geography work with an intensive study of Cleveland in honor of the Sesqui-Centennial celebration.

Our method of study followed this train of thought: We found that our city ranked sixth in size among the cities of the United States. What then were some of the reasons for this growth? By a survey of the occupations of our fathers we found that many of them worked in factories that produced steel products. Steel is made from iron ore. Then we asked, where did this iron ore come from?

Cleveland's location along Lake Erie at the mouth of the Cuyahoga must be advantageous. Did this location have any relation to the raw material used in the factories where our parents work? Our school is located not far from the lake and we had seen the great freighters on the lakes. Some had seen the huge piles of the iron ore along the harbor. Where did those freighters get the iron ore? We searched in our textbooks and learned it came from the Lake Superior region.

Someone asked, how would you go if you wished to visit this area and the reply was by boat on the lakes. How large are these lakes? How did they happen to be located here? Now we were well launched on a study of these great bodies of water along one of which our city is located.

With interest awakened in this project our first goal was to obtain information about the lakes themselves. Geography textbooks had ample information about the region around the lakes but as concerning the lakes themselves we used also Dana Bowen's *Lore of the Lakes*, *The Great Lakes* by Hatcher, all volumes of the *American Lakes Series*, *Lake Michigan* by R. G. Plumb, *The Wonderland of Lake Superior* by James A. Merrill, *Bulletins* of the Lake Carriers Association and all the issues of INLAND SEAS.

After gleaning the information we wished from these sources, we set to work in our notebooks. A map of each lake was traced. Beside or under each map, we placed the letters of the name of each lake. Using each letter as the initial of a salient fact we made a descriptive acrostic based on the name. This is the one for Lake Superior:

Largest of the Lakes.

Apostle Islands in south western portion of the lake belong to Wisconsin.

Keeweenaw Peninsula has copper mines.

Earliest cargo carried on lake was fur.

Superior and Duluth at Western end are ore shipping points.

Under French rule first.

Port Arthur and Ft. William are twin cities of Canada that are wheat shipping points.

Empties into Lake Huron via St. Mary's River and Soo Canal.

Rocky shore on the north.

Iron ore largest cargo carried at present.

Only national park in Great Lakes' Region is Isle Royale.

Renowned for its white fish, herring and trout.

The cities of Buffalo, Cleveland, Toledo, Detroit, Gary, Chicago, Milwaukee and Duluth were treated in the same manner and also states that touch the lakes.

MILWAUKEE

Manufactures many tractors.

Important shipper of grain.

Lies along western shore of Lake Michigan.

Wisconsin's largest city.

An important receiver of coal.

Unusually large central European population.

Keen competition with Chicago in manufacture of farm equipment.

Excellent harbor.

Elevator facilities are large and up-to-date.

MINNESOTA

Minneapolis is the metropolis of this state.

Itasca is the lake out of which the Mississippi flows.

Noted as the Bread and Butter State.

Nine foot channel in the Mississippi allows tow boats with their barges to reach St. Paul.

Especially fine butter is made in Minnesota.

St. Paul is the capital.

Ore is shipped from the Mesabi Range via Duluth to lower lake ports.

Ten thousand lakes, they say, lie within its borders.

A food producing state.

Our next activity was to produce a time-line which would show some "firsts" on the lakes as well as a history of the chief cargoes that have come down the lakes. A scale of one inch for one year was used. Here are a few facts we learned:

It was 81 years after the discovery of the St. Lawrence before the Great Lakes were found.

1679—First Sailboat on the Lakes.—*The Griffon*.

1804—First lighthouse on the lakes at the point where the Niagara River enters Lake Ontario.

1818—First steamboat on the lakes.—*Walk-in-the-Water*.

1838—First wheat shipped out of Chicago for Buffalo.

Fifteen-inch squares of tag board were the basis for the colored paper cut-out pictures depicting the story of the lakes from the Ice Age down to the argument about deepening the St. Lawrence. There were about 40 of these pictures and a wall hanging which changed the walls of our classroom to a visual history of the Great Lakes.

To end our project we produced a booklet which we entitled *Ship Ahoy*. Different students contributed little essays describing different types of boats that have been used on the lakes. Especially well done was Sanford Senor's description of the mail boat at Detroit. This little boy wrote:

THE MOOT

by Sanford Senor

Over the Detroit River is the Ambassador bridge. Under this bridge is a wharf which belongs to a small but important boat. This boat is called the *Moot*. It is the only mail boat on the lakes.

Mail is brought to the *Moot* in armored cars from the Detroit Post Office. Lake seamen can summon the *Moot* by one long whistle, one short and another long one. There are 20,000 Canadian and American sailors on the Great Lakes who watch for this boat every time they pass Detroit. The boat served 2,305 boats in June, 1945. Not a bad record for so small a boat!

Throughout the studying, planning and executing of this Great Lakes project the children showed great interest and eagerness to learn. In several cases, real talent for drawing, writing and handwork was evident. New interests were awakened and new enthusiasm begun. We now know what it means to say that Cleveland's location is advantageous. We are following with interest the opening of navigation on the lakes. The first boat to enter Cleveland Harbor this season came with a cargo of oil. This occurred on March 8th. The second cargo of oil entered the harbor March 12th. We're watching. A new group of Great Lakes enthusiasts is in the making at Oliver Wendell Holmes school.

*The Dream of the Voyageur**

By ELSIE JANET FRENCH

Rocking at peace on the idle wave is the Voyageur's light canoe;
Long and weary its course has run, far from the distant Sault.
Tangled forest and ambushed foe, peril by sea and shore
All is past, and the *Sieur Du Luth* rests on his faithful oar!

Rests on his idle oar, and dreams as the twilight shores grow dim,
While wave and forest together weave a lullaby for him.
Into the blue above him darts the swift auroral gleam,
And rocky cliff and terrace rise transfigured in his dream.

Stately and fair in his vision, stands the city of our pride,
And the lights from a hundred hills shine out o'er the waters far and wide!
Yonder the point flings a welcoming hand, greeting *Superior's* shore,
Lovers severed by fate unkind, meeting in joy no more!

But together the *Cities Twain* keep guard o'er the harbor within whose slips,
There rise in the dream of the Voyageur the masts of a thousand ships!
Mine and forest and prairie fair mingle their tributes wide;
Traffic flows from the netted rail down to the waiting tide!

And the Voyageur sees in his vision bright how the spoils of lake and land,
The shining grain and the ruddy ore bring wealth to our ready hand.
Through the summer night the Voyageur lies breathing the matchless air
Of the piny wilderness beyond, with its myriad lakelets fair.

He sees on the sands where the wild deer drank the checkered foot-prints light
Of the camper's child, and the gleaming tent shines in the distance bright.
And angler and hunter, woodsmen true, he sees through his dreaming eyes,
And holds them as welcome comrades here in this sportsman's paradise.

From the weary mart to the rod and gun they find but a step between,
But an hour from the desk to the lurking trout and the waving hemlocks green!
And hearts grown weary with toil and care find balm in the soothing pine;
Love blooms anew under birchen boughs, hope springs where the waters shine!

The vision changes, and Lo, he hears as early morning breaks,
The clamor and rush of a million men, and the sleeping City wakes!
It wakes, and there in a waking dream, fairer than night can bring
He sees the pride of the proud Northwest like a work of magic, spring!
The days of magic we know are past, but the Vision of *Sieur Du Luth*
Shall yet on the pages of empire be no more than the waking truth!

*This poem on "Duluth" in competition with eighty-seven others, won a prize offered by four newspapers.

MARINE INTELLIGENCE

By CAPTAIN JOHN

(This is the first of a series of reprints of articles from old newspapers on Great Lakes ships of the early days. Captain John believes that there is a tremendous lot of interesting data hidden away in the files of these old papers published in towns throughout the Great Lakes area. He urges members of the Great Lakes Historical Society to contribute similar brief sketches from their local papers which are probably on file in their library or historical society. INLAND SEAS agrees completely with him that this would be an invaluable contribution to Great Lakes history, useful to students and historians and in itself good reading. Readers are invited to contribute.

—Editor.)

No. 1

THE STEAMER *Vandalia*—This little steamer has excited considerable attention in our port, being the first one of the kind which has made its appearance here. She has Ericsson's Propellers instead of the ordinary paddle wheel, and travels at the rate of seven miles an hour. In smooth waters, it is said, she could attain a speed of ten miles per hour, but the friction would be injurious to the machinery. She is rigged like a sloop, and at a distance would readily be taken for one. This boat is moved by what is termed the screw paddle, it being something between the buckets of the old paddle wheel and the ordinary augur, so that the propellers may be said in some measure to bore their way through the water. The wheels are placed at the stern on each side of the rudder. The paddles are of iron and they work under water. Not being visible, they are admirably calculated for vessels of war, and the water is so slightly agitated that boats propelled by them must, we think, soon be extensively used on our canals. The *Vandalia* is from Oswego, on Lake Ontario, at which place we understand three more boats of the same kind are being constructed, the whole to run as a regular line between that port and this.

—Chicago *Daily Democrat*, Tuesday Evening,
May 3, 1842.

GREAT LAKES CALENDAR

By JEWELL R. DEAN

JANUARY, 1946

Despite a tapering off in the movement of iron ore and a fall strike by American bituminous coal miners, 1945 commerce on the Great Lakes was the fourth heaviest in history, year-end compilations revealed. It amounted to 175,082,683 net tons and compared with 184,159,492 tons in 1944; 175,652,684 in 1943; 182,731,421 in 1942; 171,853,904 in 1941, and 144,844,630 in 1940; the last mentioned year being the only one of the group that was unaffected by the World War II emergency. These figures are from compilations made by the Lake Carriers' Association, Cleveland. The 1945 aggregate was composed of 84,800,520 net tons of iron ore, 53,670,837 of bituminous coal, 1,575,360 of anthracite, 18,717,773 of grain, and 16,318,193 of limestone. The bituminous coal tonnage reached its high total only by a record November movement of 6,834,008 net tons when the ships were called upon for unusual efforts to rush winter supplies to Canada and northern American ports following settlement of the miners' strike.

The movement of grain was an all-time record and supplies in the western Canadian provinces and the United States' Northwest were well exhausted by late fall in forwarding of millions of bushels of the material to needy peoples of Europe. United States flag ships moved 371,683,177 bushels of grain in 1,325 cargoes and Canadian vessels carried 311,228,532 bushels in 1,469 cargoes. The anthracite tonnage showed a sharp recovery for the first time in nearly two decades, being the largest since 1927. The Lake Carriers' Association pointed out that total shipment of the bulk commodities on the lakes 1941 to 1945, inclusive, was 889,948,718 net tons which compared with 512,756,687 tons in the World War I period, 1914 to 1918, inclusive. The increase of the World War II years was 74 percent. The comparative figures reflect the vaster size of the later two-front war as well as the greater demand on the United States for supplies and materials by the United Nations.

During 1945 the Port of Cleveland maintained its position as the leading iron ore unloading port on the lakes and in the world, by receiving 12,479,293 gross tons of the mineral against 10,515,001 by Conneaut, Ohio, which sometimes occupies first place—particularly during poor business years. In its first full season as an iron ore shipping port, Port Arthur, Ontario, which with its twin, Fort William, Ontario, ranks as the greatest grain handling and shipping center in the world, loaded 137,982 gross tons of mineral from the new Steep Rock Mine in western Ontario. This mine shipped 352,033 tons via Superior, Wisconsin, for a promising total of 490,015 gross tons.

JANUARY, 1946

Vice-Admiral Marc A. Mitscher, famed leader of aircraft carrier Task Force 58 in its damaging forays against the Japanese in the war in the Pacific, was the banquet speaker at the second annual panel discussion day for Great Lakes officers. It was

held in Cleveland on January 9 with over 500 officers of ships attending. Admiral Joseph F. Farley, who had succeeded Admiral Russell R. Waesche as commandant of the United States Coast Guard on January 1, attended and was an afternoon speaker. Prior to his lengthy coast guard career, Admiral Farley was a lake seaman. He fired on a freighter and was a cabin boy on a passenger ship. The 1946 panel discussions featured radar, the wartime electronic development which will be installed on a number of lake freighters this year.

JANUARY, 1946

With a number of representatives of Canadian shipping on the lakes sitting in, the Navigation Committee of the Lake Carriers' Association held its annual two-day meeting in Cleveland starting on January 7. Captain Jacob G. Olsen, master of the steamer *Champlain* of the Cleveland-Cliffs Iron Company fleet, was chairman. Attending from Canada were George R. Donovan, secretary of the Dominion Marine Association, and Captains R. B. Angus, H. R. Baster, W. J. Moles, J. R. Stewart, William Taylor and S. J. Tischart.

JANUARY, 1946

The International Ship Masters Association, an organization that grew out of the passing of a hat at Buffalo in the winter of 1886 to raise money for the needy family of a deceased lake captain, voted at its annual meeting, held in Chicago, to amend its constitution to readmit member lodges in Canada. I.S.M.A. once had units on both sides of the border but the very benefit payments to survivors which caused it to be organized led to dropping of the Dominion lodges. The international insurance regulations were too severe. Under the constitution amendment, Canadian members and lodges will be admitted without insurance benefits. Members north of the border will share fully the social and navigational activities. It is expected that interested Canadian captains and mates will organize up to a half-dozen lodges which will petition for installation. Early petitions have been indicated for lodges at Toronto and Owen Sound. Present president of the grand, or ruling, lodge is Captain Philip E. Thorpe, Chicago, master of the tanker *Michigan*, owned by the Texas Company.

FEBRUARY, 1946

The Erie Railroad Company announced it had purchased a new ore-unloading machine of the Hulett make to replace four electric Brownhoist machines at its dock on the old riverbed at Cleveland. The rocker-arm type of unloader is replacing machines featuring a clam bucket on cables again in the march of progress on the lakes. Development of loading and unloading docks of greater speed and efficiency has been as important in lake commerce as improvements in ships. The two have progressed together and the long clear main deck of a "laker" as against the location of machinery amidships on an ocean vessel resulted from the desire for fast loading and quick turnaround for the busy inland craft. Unloading equipment for bulky lake cargoes developed chiefly in Cleveland following the days when iron ore was pushed ashore by wheelbarrows—and on a site that was only a couple of stone's throws from the location of the Erie's new Hulett.

FEBRUARY, 1946

A campaign was started by the Leathem D. Smith Shipbuilding Company, Sturgeon Bay, Wisconsin, to urge the United States government to retain improve-

ments made at bridges over the Chicago River and Drainage Canal to raise them for the passing of ships. Most of the bridges were stationary in view of ordinary tug and barge traffic and were improved to permit lake ships to pass after removing smokestacks and superstructure. The ships, including submarines built at Manitowoc, Wisconsin, had to be raised by pontoons because of the canal's shallowness, but they were able to go to the ocean in one piece. The St. Lawrence River canal locks handle ships only up to 259 feet long. During the World War I emergency many lake ships were cut in two amidships and towed to the ocean via the St. Lawrence. This method was not restarted to once during World War II.

FEBRUARY, 1946

Headquarters of the Navy Department's six Branch Hydrographic Offices on the American side of the Great Lakes was moved to Cleveland from Detroit in order to be near the center of shipping. The offices gather and disseminate navigation information. Hydrographic service on the lakes is reported to extend back to the days of the Battle of Lake Erie when charts and other required information were prepared for the use of Commodore Oliver Hazard Perry.

FEBRUARY, 1946

Boilers and engines of two Canadian corvettes were transferred this winter into two lake ships of Colonial Steamships, Ltd., at Port Colborne, Ontario. The company of which Captain R. Scott Misener is president and general manager, purchased the corvettes *Dundas* and *Port Arthur* from a long list of surplus ships of the Royal Navy. The little escort vessels were scrapped, but the boilers of the *Dundas* were installed in the steamer *Bayton* and the boilers and engine of the *Port Arthur* in the *Laketon*. The freighters will join the short list of oil burners on the lakes. Freighters on the lakes almost universally use coal to produce their power since that commodity is the second most important commodity they transport.

MARCH, 1946

Exploration of a new iron ore deposit in Canada, located east of Sault Ste. Marie, Ontario, was announced by the Westland Mining Co. of Toronto. The company reported its explorations were making progress and indicated the mineral was of a high-grade hematite type. The nearest railroad is about 27 miles south where the Canadian Pacific Railway, Soo branch, passes through Dean Lake, Ontario.

NOTES

The Great Storms of October 1929

DOWN the broad highway of the Great Lakes they came for record breaking figures both in transportation and storms, the ships of the inland seas in the year 1929. It was in October of that year that Lake Michigan went on a wild stampede of wind and waves with very low temperatures. Shipping had reached an enormous tonnage of over 127,329,000 tons in freight, one of the record seasons, but in lives lost another record was almost broken. Over 110 persons were lost on ships.

Many a sailor and landlubber will recall the October 22nd storm of that year, when the million dollar car ferry *City of Milwaukee* disappeared with a crew of 52 men. The *Milwaukee* was loaded with 27 carloads of merchandise, which she had taken at her Milwaukee docks. She pulled out early in the morning of the 22nd and should have reached Grand Haven, Michigan, about noon. She had been on the crosslake run since coming out from the Cleveland yards in 1903. Her length was 338 feet long with a gross tonnage of 2,933. Built for winter-time navigation as well as summer, she was regarded as particularly seaworthy.

But the storm that overtook the *Milwaukee* was nothing less than a winter hurricane. The barometer was very low outside the sea wall at Milwaukee and dropping fast, a forerunner of a bad gale. The wind was blowing from the northwest. "Something was brewing." Blind-snow came on and out there on Lake

Michigan not far from the shore, the *Milwaukee*, buffeted as never before, that morning of October 22, 1929, made one final plunge and went to the bottom. Only the howling of the gale was heard all that day and the worst was feared. Lifeboats were found on their courses by freighters which came through the storm of that day. Mattresses, lifeboats, chairs were picked up by the steamer *Colonel*.

Caught by mountainous waves, the ferry became unmanageable, shifting her load of boxcars, and rolled over. Thundering seas flooding her after end and an overwhelming torrent of water might have sent her down in a few minutes. Captains at South Chicago reported it was the "worst blow" in years. Vessels were behind the sea wall for days; the lake a grey dull color in solemn silence. The *Milwaukee* will always be a mystery although sunk in her home port. Along the south shore of Lake Michigan wreckage strewn the beaches from ships which were battered in the howling gale. Trees were uprooted, tents and cottages blown down. Boxcars floated around in the lake for days and rails and road beds were washed out. Black Tuesday was the worst day in 1929.

Vessels lay for days behind the break wall at Calumet Harbor, South Chicago, Illinois. Some were later sent to the yards for damage done to their plates by rivets becoming loose and some were laid up for the season. The lighthouse at South Chicago got a bad mauling and later was

reinforced with very thick walls of concrete.

One week later on Wednesday, October 29, Lake Michigan overpowered another ship, and sixteen of her crew went down in the cold and icy waters. This time it was the *Wisconsin*, 209 feet long, 1,921 gross tonnage, one of the few iron ships which sailed the lakes. Later, as the *Naomi*, owned by the Crosby Line of Milwaukee, she was on the run across Lake Michigan in the early eighties. Launched at Wyandotte, Michigan, in 1881, she had an adventurous career, transferring from one line to another. On one of her later trips she burned near Holland, Michigan. Her hulk was salvaged, rebuilt, and as almost a new ship she was renamed the *E. G. Crosby*. In World War I the ship was taken over by Uncle Sam and renamed the *General O'Reilly* and served as a hospital ship stationed in New York Harbor. After the war she came back to the lakes in her war paint and sailed as the *Pilgrim* under the flag of the Wisconsin Transit Company on her former run between Muskegon and Milwaukee until the Goodrich line bought her, put her on the Chicago and Milwaukee run, renamed the *Wisconsin*. She was built for passenger service and fitted for comfort as the best and fastest ship of her size on Lake Michigan. Every stateroom was outside, insuring good air and ventilation. Each room had an upper and lower berth, call bells and running water.

Travel had become popular aboard this fine vessel as she traveled winter and summer through fog, ice and then through the great storm which the week before swallowed the carferry *Milwaukee* on October 22. At a degree of 20 percent she had limped into Milwaukee that morning with part of her cargo smashed and badly damaged. Then came that storm of the 29th when Lake Michigan started on another furious rampage. The *Wisconsin* left Chicago for her run in a

northeast gale which picked up in intensity but kept on her course. Fourteen miles off Kenosha, Wisconsin, she started to fetch water from the high seas. Her calls for help brought out fishermen and coast guards to save the crew. Frantically they battled the mountainous seas until over 60 persons were saved and brought ashore, many thinly clad in clothes flung on in great haste. The captain and chief engineer went down with their ship.

—GEORGE A. VARGO.

Old Lighthouse Lenses

OLD LIGHTHOUSE lenses, some of which have served mariners for nearly a century, are now available for the permanent exhibits of museums, schools and maritime societies.

Coast Guard Headquarters in Washington has announced that these lenses, which have been replaced by more modern equipment, will be loaned for an indefinite period to responsible institutions.

When new, these lenses were the finest which could be obtained. Many of them were imported from France at great cost, transported with care to isolated shore areas and rocky islands, hoisted into positions in lighthouse towers to magnify the lights which warned ships away from dangerous reefs. Daily they were polished and kept in perfect condition.

Now modern designs, scientific improvements and the change from oil-burning lights to electricity have required the discarding of these lenses in favor of more efficient equipment.

The lenses are now in storage in various parts of the country. Interested organizations should request further information from Coast Guard Headquarters, Washington, D. C., stating the type and size of lenses desired, and

the institution to which the material should be forwarded.

The cost of transportation from the Coast Guard storage depots to final destination will, of course, be borne by the institution requesting the material.

The Great Lakes Historical Society has made applications for a lens.

The Twins

LOOKING BACK to the last half of the gay '90s, there are still many Clevelanders that remember and talk about the grand little ferry steamers that carried passengers between their dock at the foot of Superior Street and the noted summer resort Euclid Beach, six miles east of the river.

They were pretty little boats, painted white with trimmings with lettering a bright red. On alternating trips they carried many thousands of passengers, who fondly nicknamed them the Euclid Beach Tubs. Standing at the docks one got a three-quarter front or rear view, making them look rounded like a tub. They were both of the same dimensions, 98 feet long and 29 feet beam. Built at Cleveland in 1890 for ferry service on Lake Superior, between Duluth and Superior, they naturally got the names of *Duluth* and *Superior*.

They remained on Lake Superior until May 25, 1895, when they were placed on the Cleveland-Euclid Beach route under Cleveland ownership, and continued to carry the pleasure seekers up to 1901, when no doubt many of the old timers wonder what became of them. Again they traveled far to other waters to carry loads of passengers.

This time the twins were separated and the *Duluth* was taken over by T. C. Ewing of Escanaba, Michigan, where she was used as a ferry along the bay until 1905. In 1906 she was sold to R. L. Boynton of St. Ignace, Michigan, and

in 1910 the name was changed to *City of Cheboygan*, under the ownership of Island Transportation Company of St. Ignace. During these years she ran between Cheboygan, St. Ignace, Mackinac Island and Pte. Aux Pins. In 1924 the *Duluth* was again sold, reconstructed and renamed the *City of Port Huron* in June 27, 1924, and placed on the Sarnia-Port Huron ferry route at the head of the St. Clair River. The sturdy old wooden tub remained in daily service until 1939 when the route was abandoned because the new bridge connecting these cities was completed. She lay partly submerged a few years ago on the Sarnia bank and by now may have been scrapped.

In 1902 when the *Duluth* left Cleveland the *Superior* went back to her old stamping ground, Duluth, and was sold to the Union Towing Company who sold her in 1905 to the Pittsburg Steamship Company. She was used as a supply ship at the Soo through 1915, when she was sold to the Pringle Barge Line Company of Detroit. Converted into the tug *Robert R. Pringle*, she towed barges along the rivers until May 6, 1920, when she burned at Stag Island below Port Huron and was beached. A 48-year life, not bad for a wooden tub.

—LOUIS BAUS.

Rear Admiral Farley

INLAND SEAS salutes the new commander of the United States Coast Guard, Rear Admiral Joseph Francis Farley.

Born in Oxford, Ohio, on June 22, 1889, Admiral Farley is thus the native son of a Great Lakes state. He received his ensign's commission in the Coast Guard on June 10, 1912, and moved steadily upward, holding such posts as accounting officer, ordnance officer, athletic officer, chief communications officer, and chief personnel officer. He

served in both world wars, receiving for his services in the recent struggle the Victory Medal With Escort Clasp, and the New York State Medal. On November 1, 1943, he was promoted to the rank of rear admiral.

Admiral Farley is married, and has two daughters, one of whom is Lt. (j.g.) Elizabeth Farley of the Women's Reserve, U. S. Coast Guard Reserve.

"Shanghai" **On the Great Lakes**

In December 1945 a grain cargo went begging for a few days for transportation from Fort William to Buffalo at 11 cents. But in the 1880's enterprising vessel owners were keen to take advantage of the high freight rates of late fall. It was at times necessary to persuade capable sailor men, who could go aloft at night and do a job when they got there, to make one more voyage, although "Shanghai" was never a major industry on the Great Lakes.

This tale is not so much in the fiction class as 1945 sailors might assume. The schooner men of the '80's took to firewater like the Indians. A large percentage of them were "broke" after a season's work a few days after the last trip. Unselfish to a fault, they handled their meager wages carelessly. Exhausting their credit, they traveled by freight to the coast, returning the following season.

LATE in December, 1888, the 1,000 ton three masted schooner *C. C. Barnes* lying alongside the Wabash Elevator was floating low under a cargo of 38,000 bushels of wheat, the covering boards of her decks showing a scant 12 inches of side above the ice of the river. The Chicago river was ice bound, not blue ice, to be sure; no one would expect that mixture of mud and filth to be purified by mere frost, but it was nevertheless ice, and three inches thick.

A puffing tug was busily engaged in

ramming a channel alongside the schooner, frequently backing up to come ahead with greater momentum to crash her steel sheeted wooden bow into the brown mixture.

It was 5 p.m. and a few sightseers shivering in overcoats, watched the operations curiously.

"What's the idea," said one of them, addressing nobody in particular, "breaking her loose? She'll only freeze in again."

Another of the spectators answered him. "If she does freeze in it won't be in the Chicago river. It will be in Buffalo. Grain freights went to 10 cents a bushel. She's leaving in the morning."

The other man, evidently of some lake experience, gasped: "What! Send that schooner to Buffalo in December: why I wouldn't make the trip in her for a million dollars."

"No?" said the second man, as he started to go along about his business. "I'll say you wouldn't, not when they can shanghai sailors who will keep their mouths shut if they get fifty."

The gas lights in the windows of saloons and bawdy houses on South Clark Street were radiating their feeble gleams toward the sidewalks of Chicago's main "red light" thoroughfare when the burly figure of Jack McQuade, shipping agent, burst into the turmoil of "Sans Souci," as the drink dispensing institution operated by "Olaf, the Swede" was familiarly known. The crash of the closing door and another crash caused by a human form hitting the sawdust covered floor were almost simultaneous as big Jack McQuade landed his right on a tipsy customer importuning a "sucker drink." With not even a pause in his stride to see whether the recumbent form could arise, the shipping boss elbowed through the swaying humanity to the front bar and catching the eye of Olaf, nodded peremptorily.

Breaking away from a heated argument with a customer who, although al-

ready in that happy state designated by sailors as "three sheets in the wind," was still in possession of sufficient of his mental faculties to protest in a maudlin tongue against a short change transaction, Olaf hustled forward to confront the shipping agent.

"What's doing, Jack?" he inquired. "You know what's doing," answered McQuade curtly. "I want sailors. The Osborne Company has chartered the *Barnes* for Buffalo—grain freights went to 10 cents today. She's loaded and they're sailing in the morning."

Olaf the Swede gesticulated helplessly.

"Can't be done, Jack. I heard some of them talking today. They won't go. It's too near Christmas."

"Oh, no?" sneered McQuade. "Let me tell you something. You'll have those men aboard by midnight or lose your license. Get 'em by hook or crook and remember—I said sailors. She'll need 'em. They're to get \$50 for the trip and their fare back."

Shortly after midnight there floated in the gloom surrounding the narrow driveways in the vicinity of the docks adjoining the Wabash Elevator the lusty curses of a driver of a team pulling an express wagon with a strange load. Pulling up at a point where three towering masts projected toward leaden skies, the driver and a helper, who looked suspiciously like Olaf the Swede, disappeared six times down the forecastle hatch of a low-lying schooner whose midship covering boards were only 12 inches above water, and on each trip they deposited in one of the six bunks of the dinky forecastle an inanimate, breathing form. Again there floated through the night air the curses of a driver as he guided his horses off dark docks through narrow passageways leading away from the vicinity of the Wabash Elevator, the wagon rattling emptily.

The pendulum of time had swung

ahead five days since the three-masted schooner *C. C. Barnes* carrying a cargo of 38,000 bushels of grain and a shanghai crew cleared the port of Chicago. It was Christmas eve and the slip in front of the Wabash Elevator was again frozen solid while in the South Clark Street "red light" district a clientele of questionable gentility made merry on the sawdust covered floor amid thick clouds of tobacco smoke permeating the atmosphere of the main bar room of the "Sans Souci." Some 600 miles "east by north" as the compass points, another celebration took place in a lake port at the receiving end of the grain traffic of the Great Lakes.

Around 11 p.m. eastern time, the double doors of Harbor Precinct No. 1 in the city of Buffalo burst open, emitting a couple of prancing horses attached to a Black Maria. As the wagon bumped over the threshold, its gong clattering noisily, three burly blue coats hopped on the steps. One of them questioned his superior.

"Where to this time, Sarge?"

"Canal Street," answered the sergeant. "There's a bunch of drunken sailors taking Big Nell's place apart."

"Sailors, this time of year?" queried the first officer. "Whoever heard of a sailor with money in December?"

"They just got in today and they're lousy with money," said the sergeant. "These fellows are regular sailor men. They brought the three masted schooner *C. C. Barnes* over from Chicago in five days with 38,000 bushels of grain. Didn't you see the morning papers? Fastest schooner trip on record. Not so bad, a \$3,800 freight in five days. All the sailors got out of it was 100 bucks apiece."

"That hundred won't last 'em one day," opined the officer.

"You're not telling me," came back the sergeant.

—W. O. STUBIG.

Five North Stars

PROPOS of the *North Stars* (p. 58 of the January issue), my notes show four steamers that have borne the name on the lakes. This would make, with the schooner of 1855, at least *five* vessels rather than four, the figure mentioned by Mr. Musham. The earliest of the four steamers is the sidewheeler in 1854. Second, in point of age, is a "fast sailing Steam Yacht," Captain James Bennett, Jr., which was advertised in 1875 to carry excursions out of Mackinac Island, calling at Cheboygan, "Old Mackinac," Les Cheneaux, and "the fishing ground." The third and fourth are, of course, the package freighters (1888, 1909) of the Northern Steamship Co., mentioned by Father Dowling in "*The Vanishing Fleets*." To your list of pictures of the first *North Star* might be added a partial view which appears on p. 173 of Ralph D. Williams' *The Honorable Peter White* (Cleveland, 1907). — C. BRADFORD MITCHELL.

Important Reprint

THE Great Lakes Historical Society has received as a gift a copy of *Iron and Steel Hull Steam Vessels of the United States, 1825-1905*, by John Morrison. This is Reprint Series No. 3 of the Steamship Historical Society of America. The editor, Alexander Crosby Brown, states in his preface to the reprint that this is a little known article by an author who has long been an acknowledged authority on American steamships and who is the author of the important source book, *History of American Steam Navigations*.

On pages 15, 16 and 17 under the heading *Northwestern Lakes* is the record of iron shipbuilding on the Great Lakes. Brief histories of the companies who built iron and steel hulls include the firms of David Bell of Buffalo; the King Iron Works; the Union Drydock of Buffalo;

the Chicago Shipbuilding Company; F. W. Wheeler & Company at Bay City; the Cleveland Shipbuilding Company; the Globe Iron Works of Cleveland and the American Shipbuilding Company. Many vessels built by these firms are described briefly and there is a good picture of the *Onoko*, the first iron vessel built by the Globe Iron Works.

Copies of this pamphlet may be obtained from the Steamship Historical Society of America, Peabody Museum, Salem, Massachusetts. It is priced at 35 cents.

Useful Naval Lists

ANYONE wanting to find information about the vessels of the United States Navy will be helped by Henry P. Beers' *Bibliography of Publications Containing Lists or Other Data Pertaining to United States Naval Vessels*. This appears in the May-August and September-December numbers of the *Bulletin of Bibliography* for 1945 and is a collection of lists of vessels, not a ship register in itself. The subject matter is arranged by date, starting with 1636, the first period covered in George F. Emmons' *Navy of the United States from the Commencement* (Washington, Gideon & Company, 1853). The last list mentioned is for 1919-1920.

All in all ninety-seven books are listed, containing names of naval vessels. Whoever wishes to trace a particular ship will find Mr. Beers' bibliography decidedly helpful.

—G.W.T.

INLAND SEAS is becoming a historical magazine of accepted standing. *Michigan History*, the quarterly of the Michigan Historical Commission, regularly lists its contents in its department which itemizes the current articles in the more important historical magazines.

An Odd Pair

ONE DAY when visiting the office of my good friend, Gene Herman of the *Great Lakes News*, a blast of a steamer whistle sounded as the ship passed in view of the windows. Gene was up at once and grabbing the most available object, a grey sweater, he waved it out of the open window, saluting in return.

It was an odd pair of vessels passing down the river, the *Marita* towing the barge *India* on their way to Detroit loaded with scrap iron and steel. Both have a unique history behind them. The *Marita*, built in 1918 at South Bank on the Leeds, England, for service as a sub-chaser during the first World War under the name of *Kilmacrennan*, was known as the mystery ship. Her duties changed and later she was renamed *Seghill*, then *Kasper* and finally *Marita* (Br.). Keeping her last name *Marita* she came to Lake Erie in 1930, owned by the Cooper Steamship Company, Cleveland. Later she was owned by C. W. Bryson, Cleveland, who also owned the barge *India*.

The barge *India* was formerly a passenger and freight iron steamer of the Anchor Line built at Buffalo in 1871. After a varied career (which has been described in *INLAND SEAS* for January, 1945) she was finally made into a barge, about 1930, at Detroit, Michigan, getting back her original name of *India*.

Both were sold to the U. S. Government in 1942, and *Marita* was used by the Coast Guard for training hundreds of gunners on the Gulf of Mexico, for duty on merchant ships.

In 1945, she was sold to Honduras interests to transport merchandise in the Caribbean Sea. At Baltimore, she is slated for reconversion to a cargo carrier.

The *India* was taken to New Orleans, by way of the Mississippi River, where it was found that she was unsuited for the purpose desired. After wallowing in the Mississippi mud for a few years, she

was finally scrapped and thus ended the career of 71 years of usefulness of the gallant lake steamer.

—LOUIS BAUS.

Pacific Coast Steamship Records

A REPRINT report by Willis Kerr, Librarian, Claremont College, Claremont, California, states that records and archives of six major and six minor Pacific Coast Steamship companies are preserved in the library of Claremont College. They are said to contain "408 volumes of general ledgers, bill-books, cash journals, voucher books, insurance records, tariff books, corporation papers, boxes of insurance papers, mortgage registers, stock ledgers, pursers' records, cargo manifests, agent and ticket records and other papers." They have been roughly recorded in a typewritten calendar for reference use. These are rich resources for the student or scholar in the field of marine history. The Great Lakes Historical Society hopes to see similar source collections of Great Lakes shipping companies preserved in the libraries of the region where they may be made available for future research.

—D.L.R.

Information Wanted

MR. CLARENCE S. PAINE, Director of the Beloit College Libraries, a new member of the Great Lakes Historical Society, states in a letter, "Beloit College was conceived in the state room of Stephen Peet during a passage of the lake steamer *Chesapeake* in the late '30's. It was a decade later before the college was chartered in February 2, 1846. In June of that year the corner stone of the first building was laid within a few days of the time that the *Chesapeake* went down off Conneaut after a collision with the schooner *Porter*. We are very anxious to

locate all possible information on the *Chesapeake* and especially contemporary pictures of her if any exist."

Another member, Lt. Col. Frederick C. Curry, Director of the Leeds and Grenville Historical Society at Brockville, Ontario, is searching for a drawing of the steamboat *Sir Robert Peel*, built there in the 1830's and burned during an episode of the Canadian rebellion in 1838. He is anxious to find a sketch to make a lantern slide for completion of a series on the history of the Upper St. Lawrence.

Both will appreciate any assistance other members of the Great Lakes Historical Society can give them.

Wreck of the Pontiac

QUITE A STIR was created when the *Pontiac* was rammed by the Canadian passenger steamer *Athabasca* on July 18, 1891, and sunk at St. Mary's River at the Soo. Many claim it was deliberate. Others say it was in self-defence, but at any rate by the reports it could have been the *Athabasca* which was rammed instead of the *Pontiac*.

The American and Canadian versions, I find, are similar, both giving Captain J. F. Foote much credit for being a fine and able master of long experience. Those familiar with the inside story say that previous to the wreck these vessels passed each other in the channel. Each time Captain Lowes, master of the *Pontiac*, came speeding toward the *Athabasca*, disregarding any signals. The *Pontiac* was large and fast and her master took delight in showing her off. During the trip before the wreck, when he pulled the same stunt, Captain Foote warned him that as the lives of passengers were at stake, he would let him have it if repeated again. This is the American version.

By the Canadian version they were to put a small shipment of dynamite on the

Athabasca at Owen Sound, but Captain Foote objected. As the dynamite was urgently needed on a C.P.R. construction job, a wire was received from headquarters to put it aboard.

Captain Foote was much worried about this and when the *Pontiac* was apparently going to ram him, disregarding warning and signals, he pulled over and hit the *Pontiac*. Captain Foote lost his job over it, because the insurance company insisted. He retained the company's good will and when he died in Toronto years later they sent his body home to Owen Sound by special train.

By law Captain Foote, after making the last statement and ramming the *Pontiac*, was found guilty, but morally Captain Lowes' arrogance was the cause as it was either the passenger steamer or Captain Lowes' freighter.

—L.B.

The Great Storm of November 9, 1913

Another episode from the journal of Captain E. O. Whitney (retired) of Ashtabula. (An account of this storm appeared in Coronet Magazine for January 1946, p. 132-134.)

OUR FAMILY had been invited to the residence of Thomas Cheney for dinner that Sunday. The wind was from the North, and very cold and snowing. Toward evening the wind reached hurricane velocity, and the storm was a blizzard. Telephone and telegraph wires were down between here and Cleveland, so that we had no communication. We were still unloading boats at the time. I took all the reports of the dock with me on the train and went to the Cleveland office, where I received the orders for the following day. Then I went to the Pittsburgh Steamship office, where I got instructions to send to their agent in Conneaut, as we had no telephone communication with them. This was before they

had heard of the loss of so many ships. The following Wednesday they had more information of the ravages of the storm. The following ships had been lost or were aground on Lake Huron:

Steamer *C. S. Price*, crew of 28.
Steamer *Wexford*, crew of 20.
Steamer *Jas. Caruthers*, crew of 25.
Steamer *Leafield*, crew of 15.
Steamer *J. A. McGean*, crew of 23.
Steamer *Hydrus*, crew of 23.
Steamer *I. M. Scott*, crew of 28.
Steamer *Regina*, crew of 20.
Steamer *Argus*, crew of 24.

These boats and crews were a total loss, and about 190 bodies were recovered by our patrol at Goderich, Ontario. There were also eight or ten ships driven ashore that were later released.

I was directed by the Pickands, Mather Company to proceed to Goderich, and see what could be done for the *Hydrus* or *Argus*. At the office they told me that the Lake Carriers would take charge of the recovery work, and that Mr. William Livingstone, at the Hotel Ponchartrain in Detroit, would give me my instructions. While talking with Mr. Livingstone, I met Mr. Schaufler, of the Hanna Company, who had just returned from up in the storm area. He said it was unbelievable, the disasters caused by the storm. We went to Goderich, as directed by Mr. Livingstone, picked out a bank at that place for a depository, rented two hotel rooms, equipped them with long distance telephone, established contacts up and down the shore from Cove Island to Kettle Point, and immediately got results in recovering bodies from all the boats.

We had crew lists and identification marks where possible to identify positively the different bodies, which was no small job. We had the service of a tug and several fishing boats, to pick up the bodies along the shore. The Canadian Government turned their Steamer *Lamp-*

ton, for our use in searching the lake, from Kettle Point to nearby Cove Island in the hopes of locating some of the wrecks. The only charge made was for our meals on the ship.

Though we cruised the lake thoroughly we could discover no oil, or anything to indicate a wreck. At Kincardine and Southampton we looked over some hatches that were washed ashore from the *Hydrus* and *Argus*. They all showed evidence of being torn from their fasteners, indicating that pressure from beneath had forced the hatches off when they foundered.

The Government also gave me the Immigration Inspector, Mr. Hector Hayes, as my aid and advisor for the two weeks I was on the ship. He was of valuable assistance as he had been second mate with Captain Jas. Jackson, on the Steamer *Yale* a few years before, whose boat, the Steamer *D. O. Mills* was ashore at Harbor Beach in this same storm. The Canadian Government and people did everything in their power to assist in recovering the bodies, and let them be sent home, without going through the official red tape.

This was an experience I shall never forget; just imagine going into a room where there are about 100 bodies for identification.

We picked up a life preserver, just below Goderich, from the Steamer *Matoa*, which was ashore at Pointe Aux Barques, on the west side of the lake. This gives a fair idea of how the heavy seas must have rushed around the whole lake. There is quite a possibility that some of the ships collided.

This was undoubtedly the worst storm in the history of the lakes. I left there for home just before Thanksgiving, leaving Mr. Richard Harrison to finish the work of burials and bills. I had to return on account of being on a committee to visit the Rivers and Harbors Congress in Washington.

—E. O. WHITNEY.

The Porcupine

IN INLAND SEAS, October 1945, on page 63, was a question from George P. Wakefield about the ship *Porcupine* of Commodore Perry's fleet. I can give him the story that appeared in the *Muskegon Chronicle* in September 1938, by a staff correspondent at Spring Lake, Ottawa County, Michigan.

September 10, 1938: "Resting on the bottom of Spring Lake, occasionally showing itself in times of drought and cursed at by skippers as a menace to navigation, lies the ancient hull which few persons recognize as the bones of perhaps the most historic ship lying in Lake Michigan waters. It is the forgotten *Porcupine*, one of the fleet of nine sailing craft under command of Oliver Hazard Perry, who on September 10, 125 years ago at the all-important battle of Lake Erie broke the British strangle hold on the Middle West. What happened to the *Porcupine* after the war is not clear. It eventually was sold and had a long and useful service on the lakes. About 1854 it entered Spring Lake and sank, probably as a worn out old craft because of neglect."

In the *Muskegon Chronicle* September 13, 1938, the above story is disputed and the claim made that the old hulk was made into souvenirs for sale at the Perry Centennial in 1913. "The belief of many residents in this section that the submerged hulk lying half way between the Sheldon Marine Company and the Veit boat house in West Spring Lake is that of Commodore Perry's *Porcupine* is disputed by J. F. Johnston, president of the Johnston Boiler Works, and James Hanna of Ferrysburg. They say the hulk is that of the old steam tug *Tempest* and that the hull of the *Porcupine* was hauled from its resting place in a small cove near the Johnston Works just before the Perry Centennial 25 years ago. Mr. Johnston says a former foreman of the boiler works,

the late Charles Bolthouse, and the late Klaus Katt, both well known early day Ferrysburg residents, pulled the *Porcupine's* hull, then nothing but weather blackened oak ribs and keel, from the lake. The wooden ribs and keel were made into yardsticks and rulers for sale at the Perry Centennial, and the hand-forged iron spikes into paper weights and other articles. He says Mr. Bolthouse obtained documents from the Bureau of Navigation proving identity of the hulk. For some reason the Perry Centennial Committee did not want the remains, and Mr. Bolthouse and Mr. Katt salvaged them to make into relics. The heavy timbers were doweled together, proving its early construction. According to Mr. Johnston the *Porcupine* plied the lakes in the early lumber trade under a different name which he could not recall. He said the vessel was beached here in the early lumber days, coinciding with the date, 1854, generally given by those who claim the other wreck as that of the *Porcupine*.

Again in the *Muskegon Chronicle*, September 22, 1938, from its staff correspondent at Spring Lake, is another chapter. "Mrs. Mary Bolthouse, widow of Charles C. Bolthouse, has a printed card giving a history of the old vessel and tells of its raising and exhibition at the Perry Centennial by the late B. J. Reenders, former Cleveland school teacher, a native of Ferrysburg, and cousin of Mr. Bolthouse. The card evidently printed to accompany articles made from the old craft to be sold as relics at the Centennial, is headed 'Souvenir' and history of the Battleship *Porcupine* in the Battle of Lake Erie, Sept. 10, 1813, under command of Capt. Oliver H. Perry. The *Porcupine* after the battle continued in government service until 1842 when she was purchased at Erie, by Thomas W. Ferry of Ferrysburg, Ottawa County, Michigan, afterwards U. S. Senator. She was taken to Ferrysburg,

repaired and placed in the lumber carrying trade between Grand Haven and Chicago until 1847, when she sank in Spring Lake at Ferrysburg.

"There she remained until 1898 when Charles C. Bolthouse and B. J. Reenders raised her from her watery grave and by means of rope, tackle, and rollers brought her to rest under the apple trees of Mr. Reenders' boyhood home. On June 29, 1913, she was taken to Put-in-Bay for the Perry Centennial and there exhibited by B. J. Reenders as an historical and educational feature. The sentence 'This is a souvenir of the old *Porcupine*' appears under a blank apparently left for a description of the relic. It is signed B. J. Reenders. Mrs. Bolthouse's card is the only conclusive evidence regarding the old fighting craft, although it and other evidence definitely proves that the craft finally found a resting place in the ooze of Spring Lake after her useful years were over."

"Thomas W. Ferry, alluded to as purchaser of the *Porcupine*, was president pro tem of the U. S. Senate when Congress adjourned Saturday March 3, 1877. The vice-president had died, and the legend is that Senator Ferry acted as President until the inauguration of President-elect Hayes on March 5."

The above information is copied from clippings in my files. — CHARLES H. YATES, Muskegon, Michigan.

Membership Committee

Wade C. Browne of Cleveland has been added to the Membership Committee of the Great Lakes Historical Society.

Index to Inland Seas

THE index to volume one, January-October, 1945, is now ready. Except to libraries and historical societies copies will be sent only on request.

This Month's Contributors

(Excepting the Editorial Staff)

F. CLEVER BALD is University War Historian at the University of Michigan and member of the Staff of the Michigan Historical Collections.

THOMAS B. DANCEY of Dearborn, Michigan, was formerly a radio operator and purser on the lakes.

A. WINIFRED ELLIOTT teaches fifth grade pupils at Oliver Wendell Holmes School, Cleveland.

ELSIE JANET FRENCH is a retired school teacher living at Chicago, whose poetry has appeared before in *INLAND SEAS*.

PEARL E. KILLINEN is a staff member of the Fairport Harbor Historical Society.

THOMAS H. LANGLOIS is Director of the Franz Theodore Stone Laboratory, at Put-in-Bay, and Chief of the Section of Fish Management and Propagation, Ohio Division of Conservation.

WILLIAM E. SCOTT of Two Harbors, Minnesota, is probate judge of Lake County.

A. T. ZILLMER is the former secretary-treasurer of the C. & B. line.

GEORGE A. VARGO of Benton Harbor, Michigan, is a photographer and collector of Great Lakes ship photographs, as is LOUIS BAUS of Cleveland, to whom *INLAND SEAS* is indebted for many fine pictures.

A.B. is ALFREDA BURROWS of the Business Information Bureau staff of the Cleveland Public Library; J.W.B. is JAY W. BESWICK of the Literature Division; P.W.M. is P. W. McDERMOTT of the General Reference Division.

Book Reviews

SIR GEORGE SIMPSON, OVERSEAS GOVERNOR OF THE HUDSON'S BAY COMPANY; A PEN PICTURE OF A MAN OF ACTION, by Arthur S. Morton. Published by Binfords-Mort for the Oregon Historical Society, c1944.

When George Simpson left his native Scotland in his early twenties and went to London, where he was taken as clerk into the firm of Graham, Simpson & Wedderburn, little did he realize that he was thus to make a contact which would direct the course of his entire life, and that he would, as a result, make an impress upon the history of the New World. Andrew Wedderburn, the principal partner of Graham, Simpson & Wedderburn, occupied an influential position on the Board of Directors of the Hudson's Bay Company, which had been organized more than a century before for purposes of trade. In 1820, because of the bitter struggle between the Hudson's Bay Company and the rival North West Company, there was a possibility that the overseas governor, William Williams, might be arrested, and it was felt advisable to send a new man who could assume the responsibility of administrative head of Rupert's Land, as the region was called, in case the need should arise. Wedderburn chose Simpson for the task, and this marked the beginning of years of devotion on Simpson's part to the work of the Hudson's Bay Company.

The story of Simpson's life, and of the company with which it thus became so inseparably connected, forms a fascinating thread of history, to which this book does full justice. The author, formerly professor of history at the University of Saskatchewan, displays sound scholarship, and has woven a narrative that is both historically accurate and readable.

Part of the story has its setting in the Great Lakes region. One of Simpson's first duties after arriving in Canada was to travel from Montreal along the northern shores of Lakes Huron and Superior to Fort William—a route that he was to take over and over again in the years to come. He then proceeded northward to take charge of the Athabasca Department of the Hudson's Bay Company, with headquarters at Fort Wedderburn. When the union of the Hudson's Bay and North West companies was effected a year later, Simpson was advanced to the position of governor of the Northern Department, and Williams became governor of the Southern Department. Then when Williams retired in 1826, Simpson also acted as governor of the Southern Department, which included the posts on the Great Lakes. Finally in 1839 he was made governor-in-chief of all Rupert's Land, ruling from the Atlantic to the Pacific, from the Columbia River to the Russian territory of Alaska. During the score of years that followed, he traveled widely, efficiently administering the affairs of the company and extending its influence until 1858, when the company declined to accept the renewal of its license on the terms offered by the government.

Only slight mention is made of Simpson's famous overland journey around the world by way of Siberia, during which he succeeded in improving relations with the Russian American Fur Company. One might also wish that more attention had

been given to his personal life. Such an omission is perfectly understandable, however, in view of the fact that Simpson so thoroughly identified himself with his office and its duties, always making personal concerns secondary. Thousands of his letters and other communications are available, but they deal almost entirely with business matters. Nevertheless, the book is much more than a collection of dry facts. While pictured as an extremely able and responsible person. Simpson is not idealized. He too made mistakes, at times misjudged, and exhibited other frailties of which men are capable, and these are pointed out. As the result, he emerges from the pages of the book as a living, human personality.

—J.W.B.

THE CASE AGAINST THE ADMIRALS, by William Bradford Huie. New York, E. P. Dutton, 1946. \$2.50.

A slashing attack on the Navy's opposition to air power and to a unified command, by a former Seabee, author of *From Omaha to Okinawa*, *The Story of the Seabees*, and *The Fight for Air Power*. While the army was equally stubborn in its antagonism to the flyers, as witness the courtmartial of General Mitchell, it experienced a change of heart. This is connected with the rise to power of General Marshall and General Eisenhower. After 1939 the army, says Mr. Huie, has accepted modern conditions of warfare; the navy is still blindly reactionary.

Here is the explanation of Pearl Harbor, which assault was anticipated in a document, prepared August 20, 1941, by Major General Frederick L. Martin, army air commander in Hawaii, and Vice Admiral Patrick N. L. Bellinger, air defense officer of the Pearl Harbor naval base. This document was not even considered by the navy.

Attention is given to Admirals Halsey and Nimitz who at one time favored unification of command but later changed their views, presumably because their fellow admirals also were opposed to unification.

The book is angrily written, sometimes to the point where it is not clear which aspect of navy conservatism the author is attacking: unwillingness to cooperate with the army, lack of appreciation of the plane and its possibilities, or a stand pat attitude generally. Mr. Huie is equally against all three, but would have carried more weight if he had written less excitedly.

—G.W.T.

BLACK SHIPS OFF JAPAN, THE STORY OF COMMODORE PERRY'S EXPEDITION, by Arthur Walworth. New York, Alfred A. Knopf, 1946. \$3.00.

Before 1854, Matthew Calbraith Perry was known to the world as the young brother of Oliver Hazard Perry. After that year, however, his fame so overshadowed "Perry of the Lakes" as to start the latter on the way to becoming a purely local hero. For on March 31, 1854, the younger Perry brother successfully negotiated the first Japanese-American treaty, and brought Japan into the family of nations.

Calbraith had a Perry monument too, in Perry Park, Kurihama. Anniversary celebrations of his landing in Japan became an old Japanese custom. A lock of his hair, a coat button, some gold braid, and his wedding ring were placed in the Imperial Museum. Perhaps the most significant Japanese tribute, however, was their destruction of the Kurihama monument in 1944.

Although it was inevitable that the bamboo curtain of Japanese isolation would be penetrated, it was Perry who forced the issue at a time when the very soil was considered sacred, and before Japan was either willing or able to accept foreigners.

Half-hearted and bungling attempts had previously been made, and the Dutch had long been granted some humiliating concessions at Nagasaki—a communication with the outside world that was painstakingly kept to peep-hole size.

In 1600, some fifty years after the introduction of Christianity to Japan by St. Francis Xavier, there were 300,000 Christians in the islands. In another fifty years of violent persecution, all outward manifestations of Christianity had been blotted out, and the slightest foreign contact forbidden. During the following two centuries the only references to the outside world were the annual requirements of trampling on the cross, and the controlled Dutch commerce at Nagasaki.

Black Ships Off Japan is a documented record of the Perry expedition to Japan during the years 1853 and 1854. Although detailed, it is a narrative full of interest and suspense. The earthen forts and medieval guns of Japan were, of course, no match for Perry's fleet, but the numbers and cunning of the adversary that surrounded the fleet in Tokyo Bay, provide material for a fascinating adventure story, particularly since the success of the mission hung more on bluffing than superior arms. Besides this, the book contains much enjoyable description of the islands and their people at that time, and offers a view of the roots of modern Japanese foreign policy. Private journals of participants in the expedition, and Japanese documents add much to the official story. An ample bibliography and an adequate index are provided along with an appendix of illustrative documents. The illustrations are excellent.

—P.W.M.

THE LAST OF THE *LOGAN*; THE TRUE ADVENTURES OF ROBERT COFFIN, MARINER IN THE YEARS 1854 TO 1859, edited with an introduction by Harold W. Thompson. Ithaca, New York, Cornell University Press, 1941. \$2.00.

The Coffins, who settled in Nantucket in the seventeenth century, are perhaps the first family of whalers. Robert Coffin was brought up on a farm in Dutchess County, New York, but having in his blood that same spirit of adventure that fired the souls of many of his ancestors, he was not content to live the settled life of a farmer. From his early youth he was restless, frequently wandering away from home for considerable lengths of time.

On one such occasion, when he needed money for a college education, he left home with the intention of earning the necessary cash by teaching school. Finding this method discouraging, he went to New Bedford and joined the crew of the *Logan*, a whaling ship which was originally a Boston-East India merchant vessel. It left port late in 1854, when Coffin was twenty-one years of age. The long voyage which followed, and other adventures which resulted during the next five years, are the subject of this book, recorded in Coffin's own words.

The vessel's course led first to the Azores, then southward, around Cape Horn, to New Zealand, and on to the North toward the Fiji Islands. The whaling experiences along the way, in both the Atlantic and the Pacific, are recounted in a manner somewhat suggestive of *Moby Dick*. North of New Zealand the ship was wrecked on what was known as Rapid Reef. Most of the crew saved themselves in boats, and after enduring many hardships they reached the Fiji Islands. There Coffin enjoyed life among the natives until the Yankee barque *Dragon* took him to Sydney. He spent four years in Australia, where he was engaged in a variety of occupations, including work as a farm hand, as a gold prospector, and as a member of the Water Police. Among the most interesting passages of the narrative are his descriptions of places, bird and animal life, and incidents in this Australian phase of his adventure. When

finally he boarded the *James Hovey* for America in 1859, it was not for the purpose of settling down with his family, but because war was brewing and he wanted to have a part in it.

Coffin did not write the account until about fifty years later when he was nearly eighty years of age, and consequently there are some inaccuracies. Under the circumstances, however, the errors are surprisingly few, and the author shows remarkable ability to recall vividly and to record even the most minute details. He wrote two versions. One ends with the shipwreck, while the other has lost its opening and starts at the Azores. The problem of editing, therefore, including making a synthetic version of the two, to the extent that they overlap, and Mr. Thompson has performed this task with marked skill. He has also prepared a very enlightening introduction and notes, which supply supplementary information and background material and which serve to clarify vague points and to explain inaccuracies.

The book has its dull spots, but more often it is exciting and romantic. Occasionally there are annoying bits of egotism. While not particularly literary, the quality of the writing is superior to the general run of such personal narratives. —J.W.B.

SHIPS OF THE REDWOOD COAST, by Jack McNairn and Merry MacMullen. Stanford University Press, 156 pp. \$3.

The Northern California coast is rugged. It is a region of wild seas, heavy fogs, and high on its banks great trees grow toward the sky. It has another name, the "Redwood Coast." The author calls it Paul Bunyan country and the steam schooner, the maritime version of Paul's faithful blue-eyed ox. The schooners were small because they had to be, no larger ship could get through the breakers and into the dog-holes on the Mendocino coast. A dog-hole, so called because it is a very small indentation in a rocky coast line, is a feat for even a small boat to enter, squirm around, and crawl out again.

Considerable coastwise traffic preceded the development of the redwood lumber trade. However, it was practically unknown until the discovery of gold in California in 1848. Then for several years it was sailing ships that carried supplies and various cargoes in and out of San Francisco and the ports of the Columbia River. By 1858 this coastwise service was well established and several side-wheelers had been brought around the Horn.

In 1860 there were about three hundred small sawmills operating among the redwoods and by 1885 there were around four hundred of them. Sailing ships were frequently becalmed with their valuable cargoes and not infrequently were blown on rocks or sandbars becoming total losses. To combat this an ingenious mariner hitched a steam engine to one of the little windjammers and thus revolutionized coastwise lumber transportation. As would be natural, there was a great deal of opposition, old captains argued that valuable cargo space was lost through the installing of engines and boilers and equally valuable deck space used by deck bunkering of coal — but the conversion went on.

In 1888 Robert Dollar, then operator of a redwood mill at Usal, California, ordered the first vessel, from the yards of Boole and Beaton, to be complete with engines. Many of the northern mills then built their own steam schooners and towed the hulls to San Francisco where Fulton installed engines and boilers. Changes in the steam schooner were soon noticed. They were longer and superstructure was added to house officers and passengers above deck. In 1893 they were changed again

when use of fuel oil was introduced and though not successful at first it became eventually the chief fuel.

The square schooner stern gave way to a rounded stern which had the advantage of getting up along side a wharf easily. During World War I small steel vessels were built and later were sold by the U. S. Shipping Board to operators who converted them into lumber carrying ships. The schooner, the *Esther Johnson*, built in October 1923 was the last of the wooden steam schooners. Now, lumber is usually hauled by motor trucks and the lumber schooners are anchored in mud flats or have been converted to other uses such as garbage ships, cattle carriers, fish-reduction ships, and salvage ships.

Many interesting tales are told, particularly of the period before 1900, when most of the schooners plied in and out of the Mendocino dog-holes taking off lumber and a few passengers and returning with supplies and passengers. Captains were frequently nicknamed. Captain "Hog Aleck" was master of a steam schooner which on one voyage found herself with a deckload of hogs on the hoof. The little vessel ran into a gale and she began to go to pieces. Coast guardsmen came out in a surfboat to rescue the crew and found the ship's master clinging to a bit of shattered wreckage. When they stopped to pick him up he shouted, "De Hell mit me! You safe dem hogs!" Wrecks were frequent and salvage difficult. Heroism of one sort or another was a daily occurrence.

Ships of the Redwood Coast is a narrative history of the lumber industry of California and of the ships and men that carried it as chief cargo over a period of some seventy-five years. Appendixes list names of vessels, builders, where built, their disposal and date, conversions, operators, the lumber ports of northern California and the masters of the wooden steamers.

—A.B.

YANKEE SHIPS IN CHINA SEAS, by Daniel Henderson. New York, Hastings House, 1946. \$3.00.

"Adventures of Pioneer Americans in the Troubled Far East" is the subtitle of this very readable account of the China Trade which 150 years ago built up ports like Salem and Boston. Of Great Lakes interest is the narrative of the eastern ventures of John Jacob Astor, whose fur business once had its headquarters at Mackinac. Another trade pioneer was Amasa Delano, a fourth cousin of Frederick Delano, the grandfather of Franklin Delano Roosevelt.

The book has many portraits and pictures of old-time ships and Chinese scenes. Its extensive list of books consulted will keep anyone wishing to pursue the subject further busy for a long time.

—G.W.T.

SCIENCE OF THE SEVEN SEAS, by Henry Stommel. New York, Cornell Maritime Press, 1945. \$2.50.

The Navy V-12 unit class at Pierson College, Yale University, was wisely started at the very beginning of the subject in this manual on the sea, the sky and ocean life. Mr. Stommel, a Fellow of Pierson College, realized that many veteran sailors know about waves, tides, clouds and storms only from rule-of-thumb experience. Of the causes of these manifestations their knowledge is often inaccurate and incomplete. Any follower of the sea, and the Great Lakes as well, will find, when he reads this pocket-size volume of 200 pages, that many gaps in his information have been painlessly filled in.

Among the items new to many who go down to the sea in ships is the speed of waves. A wave only one foot long has a velocity of 1.1 knots; for one of 2000 feet the velocity is 48.4 knots. Mr. Stommel next deflates sailors' yarns of waves mountain high. Ocean observations seldom reveal waves over 40 feet from trough to crest, though in hurricanes they are said to attain 100 feet. Lake navigators with taller tales will have the burden of proof against them.

While tides and ocean currents concern the ocean navigator rather than the lakes sailor, ice is a peril known to both. The formation of ice, hail and sleet are explained and also icebergs. Here the ocean is supreme. Even the Coast Guard's *Mackinaw*, which has bored its way through the worst ice the lakes can offer, might be stumped by an Antarctic berg 20 miles wide, 70 miles long and 2500 feet thick, 270 feet of which were above water.

Next come the effect of shores and islands upon currents, with discussion of lost or unknown islands that have lately been found. As late as 1915 the Belcher Islands, a group whose area is 3,000,000 acres, were discovered in Hudson Bay. Three centuries of travel had failed to put them on the charts.

Turning to the sky, Mr. Stommel explains atmospheric optical illusions, mirages, rainbows, ghost suns and coronas, which often are helpful in foretelling the weather. The Northern Lights and shooting stars are included also.

Then come fog, clouds, and wind, the time-honored opponents of the navigator. Celestial bodies and ocean life are the final topics treated in this most comprehensive, well illustrated and fascinatingly written little book.

—G.W.T.

THE WILLIAM F. FITCH, ARMY REPAIR SHIP, by George H. Harlan.
(In *Pacific Marine Review*, February, 1946, p. 130-134.)

A little-known Great Lakes contribution to the winning of the Pacific war was the work of the army repair ships. There were five altogether, besides three repair barges, all equipped to make major repairs to all types of vessels. These mobile repair yards were preferred to permanent shore installations which the shifting of the war zone might cause to become far removed from the battle front before they had a chance to do much.

All five ships were converted Great Lakes ore carriers. Typical was the *William F. Fitch*, which Mr. Harlan describes by way of example. This was built in 1902 by the Detroit Shipbuilding Company. Transferred to the Gulf, the *Fitch* was transformed by the Boland Machine Works of New Orleans into an ocean-going cargo vessel. In this capacity she served the Army until she was commandeered for repair ship duty.

The *Fitch* is a steel deck freighter of four hatches, with her wheelhouse on an island house between hatches Nos. 2 and 3, and her machinery aft. She has a small triple expansion engine of two small Scotch marine boilers of the single-end type, and has a speed of eight knots, adequate for her work. After alterations the Coast Guard operated the ship, and the 801st Army Marine Ship Repair Company handled the repair work.

Had it not been for the repair ships, disabled vessels would have had to be towed hundreds or thousands of miles for overhauling, or abandoned where they lay. The work of the repair ship may fairly be called vital in the Pacific war.

—G.W.T.

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